HydroChem
INDUSTRIAL SERVICES, INC.

SERVICE LOG

PAGE 10

CUSTOMER	DATE	TREATMENT NUMBER
AEP CONESVILLE	4/17/2006	022-7853

RETAINER SAMPLE TAKEN AND TAGGED ☐ YES ☐ NO

COMPOSITE DRAIN TAKEN ☐ YES ☐ NO

TITRATION RESULTS →	KNOWN SAMPLES	SOLVENT	COMPOSITE ANALYSIS RESULTS →	CONCENTRATION	IRON	COPPER	PH AFTER NEUTRALIZATION	CORROSION RATE OF CONCENTRATED SOLVENT

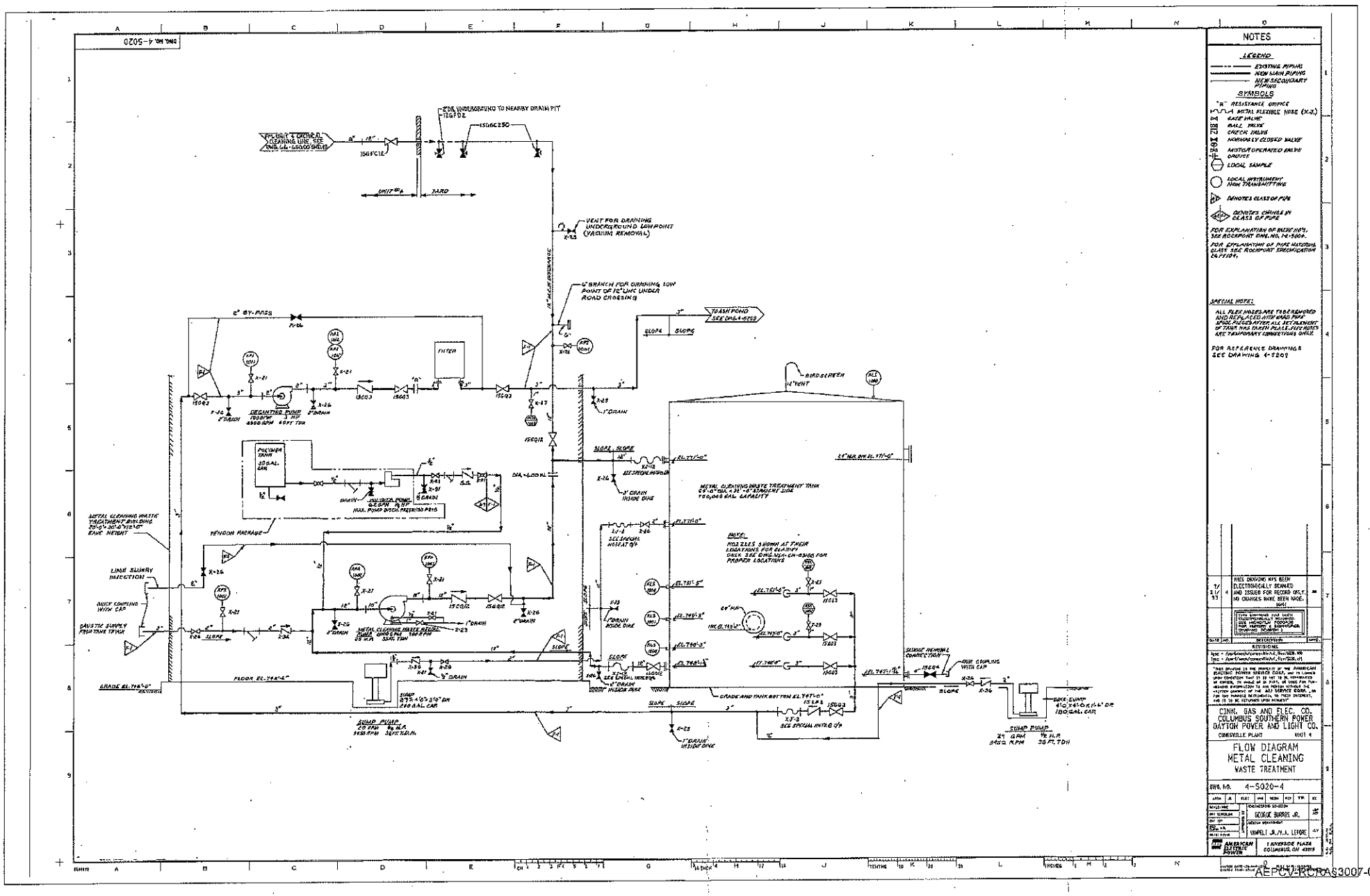
STEP	TIME	DETAILS	TEMP.	CONC.
	0730	HYDROCHEM ON SITE CHECKING IN WITH MIKE DAVIS ABOUT STARTING THE INCINERATION AND CLEANING OUT WASTE METAL TANK.		
	0800	ALL IS CLEAR TO START CREW SIGNING IN ON PERMIT TO ENTER TANK.		
	0900	CREW NOW STARTING TO VAC OUT WASTE THAT IN TANK FROM MANWAY.		
	1045	TANK IS NOW EMPTY,CREW TESTING TANK BEFOR ENTERING .		
	1100	CREW CANNOT GET MONITER TO WORK CALL YOH FOR SOMEONE TO BRING ONE ,CREW GOING OVER TO START INCINERATION OF WHATS LEFT IN FRAC TANK.		
	1130	CHECKED IN WITH CONTROL ROOM AND ALL IS OK TO START INCINERATION CREW GOING UP TO INSTALL LANCES.		
	1145	LANCES ARE NOW IN AND FLOW RATE IS 50 GPM WILL HOLD THIS FOR 1/2 HR .		
	1200	CONTINUE TO INCINERATE AT 50 GPM.		
	1300	CONTINUE TO INCINERATE AT NOW 65 GPM.		
	1400	CONTINUE SAME ,SOME OF CREW GOING OVER TO START CLEANING WASTE METAL TANK. NOW HAVE MONITER .		
	1500	CONTINUE SAME ALL OK IN CONTROL ROOM ALSO CONTINUE TO CLEAN TANK,LOTS OF MATERIAL IN TANK.		
	1600	CONTINUE SAME ,ALL OK		
	1700	CONTINUE SAME.		
	1810	WASTE METAL TANK IS NOW CLEANED CREW TAKING VAC TRAILER OVER TO BURN OFF REMAINS OF WAST FROM TANK.		
	1920	ALL WASTE IS INCINERATED CREW FLUSHING LINES AND STARTING TO RACK UP EQUIPMENT.		
	2100	CREW OFF SITE.JOB COMPLETE.WILL RETURN TOMORROW TO GET PAPER WORK SIGNED.		

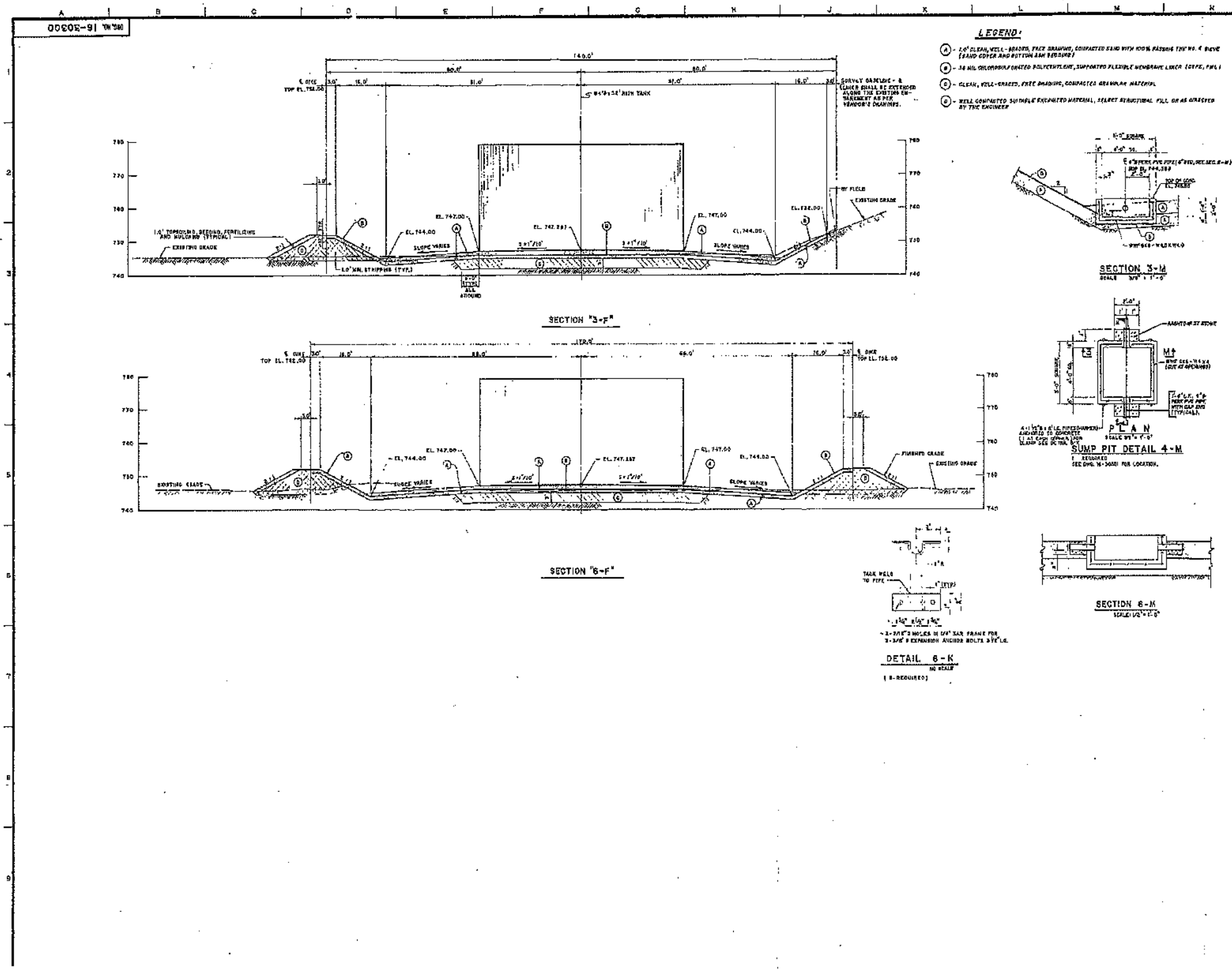
HOW DID EQUIPMENT FUNCTION ON JOB?

EXPLAIN FAILURES (USE ADDITIONAL SHEETS IF NECESSARY) →

MATERIALS	QUANTITY

SHIFT SUMMARY		SERVICE SUPERVISOR IN CHARGE OF SHIFT SIGN HERE →			
EMPLOYEES	HRS.	EQUIPMENT	REG. HRS.	PUMPING HRS.	





GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL CONFORM TO A.E.P.S.C. SPECIFICATIONS NO. 1000A.
2. ALL EXPOSED EDGES SHALL HAVE A 3/4" HIGH BEVEL.
3. ALL EXPOSED VERTICAL EXTERIOR CONC. SURFACES SHALL HAVE RUBBED FINISH.
4. CONC. SHALL BE CAPABLE OF DEVELOPING A MIN. COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.
5. CLAMPS AND PIPES (LINER) SHALL BE GALVANIZED OR BETTER.
6. SEE VENDOR DWG'S. FOR LINER PENETRATION AND ANCHORAGE DETAILS.
7. SEE MECHANICAL DESIGN DRAWINGS 4-5209 AND 4-5212 FOR PIPE PENETRATIONS.

MATERIALS

CONCRETE	1 C.Y.
WWF 6x6-W4xW4 (5' WIDE)	15 L.F.
LINER (CSPE, PWL 36) VENDOR	8,400 S.F.
1 1/2" GALV. PIPE	38 L.F.
CLAMP (DETAIL 6-K)	8 REQ.
4" DIA. PERF. PVC PIPE	3 L.F.

ALL MATERIAL BY CONTRACTOR EXCEPT LINER

REFERENCES

16-30301	METAL CLEANING WASTE TREATMENT FACILITY – PLAN
4-5209	METAL CLEANING WASTE TREATMENT FACILITY – GENERAL ARRANGEMENT WITH YARD PIPING
4-5210	750,000 METAL CLEANING WASTE TREATMENT TANK
4-5211	PUMP HOUSE PIPING PLAN, SECTIONS AND DETAILS
4-5212	PIPING DETAILS

REVISIONS

THE CINCINNATI GAS AND ELEC. CO.
COLUMBUS SOUTHERN OHIO ELEC. CO.
THE DAYTON POWER AND LIGHT CO.

CONESVILLE PLANT

CONESVILLE OHIO

METAL CLEANING WASTE TREATMENT FACILITY SECTIONS

DWG. NO. 16-30300-0

AMERICAN ELECTRIC POWER SERVICE CORP.

AEPCV-RCRA§3007-0102

UNITS 5 & 6 2008 CLEANING

American Electric Power
Conesville Plant
47201 CR 273
Conesville, OH 43811 9799
740 829 2378
www.aep.com

AMERICAN® ELECTRIC POWER

June 28, 2008

Ohio Environmental Protection Agency-SEDO
2195 Front St.
Logan, OH 43138
Att: Mr. Aaron Pennington

Dear Mr. Pennington,

This letter serves to notify you that the AEP Conesville Plant completed the Chemical Cleans for Units 5 & 6 on June 20, 2008.

The piping to the metal cleaning waste tank was modified for these cleanings and the waste from Unit 5 and Unit 6's cleaning was routed there for storage. The total volume of waste and rinses for both units was 290,000 gallons and was contained in the metal cleaning waste tank until testing was complete.

A TCLP composite for the waste was analyzed and found to be in compliance with the requirements of our NPDES permit for the Internal Monitoring Station 0IB00013608608 for Iron and Copper. Results of the analysis are enclosed.

Incineration of the waste was conducted by Veolia, the cleaning contractor in Unit 5 boiler from June 17-20. There were no issues related to this incineration. If there are additional questions, please call me at 740-829-4065.

Sincerely,

G.M. Hammond

G.M. Hammond
Plant Environmental Coordinator, Sr.
AEP Conesville

cc: Mr. Dean Ponchak

emailed 6/30/08
hardcopy sent 6/30/08

Form WWP-R01
Rev. 13, 4/99

American Electric Power
Dolan Chemical Laboratory
4001 Bixby Road
Groveport, Ohio 43125

AEP
AMERICAN ELECTRIC POWER
AEP: America's Energy Partner™

Waste Analysis

Location: Conesville Plant
Lab Analysis No: 082219-001
Sample ID: U4 FGD Ball Mill Clean Up

Date Collected: 06/20/08
Date Received: 06/23/08
Date Reported: 06/30/08

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/27/08	SW 6010B	5
Barium, Ba	0.37	mg/L	dam	06/27/08	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/27/08	SW 6010B	1
Chromium, Cr	0.02	mg/L	dam	06/27/08	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/27/08	SW 6010B	5
Mercury, Hg	0.0003	mg/L	chl	06/27/08	7470A	0.2
Selenium, Se	< 0.2	mg/L	dam	06/27/08	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/27/08	SW 6010B	5

Report Issued by: Brian S. Snyder

xc: D. B. Glazier/G. M. Hammond - Conesville Plant
D. E. Limes

Brian S. Snyder, Chemist II
E-Mail: bssnyder@aep.com
Tel. (614)836-4224 *Audinet 210-4224*
Fax (614)836-4168 *Audinet 210-4168*

VEOLIA
ENVIRONMENTAL SERVICES

JOB SERVICE LOG

COMPANY: AEP/ COLUMBUS & SOUTHERN POWER		**DATE:** MAY 26, 2008
EQUIPMENT: CE BOILER	**UNIT:** # 6	**SERVICE:** CHEMICAL CLEANING
SOLVENT SYSTEM:		**VOLUME:** 51,400 GALLONS / 428,516 POUNDS
CUSTOMER CONTACT: Bethany Schunn / Mike Davis	**LOCATION:** Conesville, Ohio	**SUPERVISOR:** Steve Baker / Wayne Hugart

DATE	TIME	SERVICE	TEMP.	PSIG
5/26/08	0800	Veolia crew on site meeting with Bethany Schunn to start setting up		
		Equipment for chemical cleaning service to unit # 6 boiler.		
	0815	Start spotting pumping equipment at work site. Hookup chemical hoses		
		To pump trucks and chemical tanker.		
	0930	Hooking up chemical injection hoses to boiler drum injection point.		
	1100	Veolia crew has setup complete. Waiting on plant to heat boiler for		
		Chemical injection. Veolia will wait to mix inhibitor into EDTA until		
		Boiler is heated and ready for chemical injection. Veolia standing by		
		Eaiting on plant.		
	1200	Continue standing by waiting on plant to start heating boiler.		
	1300	Veolia crew out of plant for lunch.		
	1400	Veolia crew back from lunch still on standby waiting on plant to heat		
		Boiler.		
	1500	Continue standing by waiting on plant.		
	1545	Veolia crew mixing 52 gallons of cronox 240 inhibitor into EDTA		
		For chemical injection.		
	1600	Continue circulating EDTA and inhibitor to insure good mix		
		Concentration for chemical injection.		
	1630	Veolia will continue to let EDTA and inhibitor mix while waiting on		
		Plant to prepare boiler for chemical injection.		

DATE	TIME	SERVICE	TEMP.	PSIG
5/26/08	1730	Continue standing by waiting on plant to get boiler hot.		
	1800	Talked to plant personnel about holding safety meeting.		
	1845	Hold safety meeting with plant personnel in unit 6 control room.		
	1855	Plant operations informed Veolia that they have a leak in their		
		Circulation pump and will not be able to inject chemical until the leak		
		Is repaired		
	1900	Waiting on plant to repair leak on pump. Night shift on location going		
		Over job progress, safety and job procedure. Put oil lighters in.		
	2000	Day shift out of plant. Pull all oil lighters from boiler. Boiler at temp.		
	2030	Plant ready to start draining down boiler drum for initial chemical		
		Injection of 4,000 gallons of Di-ammonium EDTA.		
	2050	Plant stopping drain down of drum. Drained out 5000 gallons of water.		
	2120	Veolia starting chemical injection of inhibited Di-Ammonium EDTA		
	2200	Continue chemical injection.		
	2300	Chemical injection completed. 4,114 gallons injected for a 3.73%		
		EDTA in the boiler. Veolia walking down boiler checking for leaks		
		And monitoring for hydrogen. Check temperatures of boiler.		
	2400	Veolia checking temperatures and walking down boiler checking for		
		Leaks and monitoring for hydrogen.		
5/27/08	0015	Plant wants to drain 2000 gallons of solution from boiler. Drum level to		
		High. Getting water in from pump seals.		
	0030	Boiler drain completed.		
	0045	Plant cut off all fires on boiler. Boiler temperature is at 204 degrees.		
	0100	Continue boiler circulation. Veolia walking down boiler checking for		
		Leaks and monitoring for hydrogen.		
	0200	Veolia walking down boiler and checking temperatures.		
	0300	Continue checking temperatures and walk down boiler checking for		
		Leaks and monitoring for hydrogen.		
	0400	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen.		
	0500	Veolia walking down boiler. Observed blowdown valve leaking		
		Through. Inform plant operations about leak so they can check on it.		
		Pump seal water still leaking through increasing boiler drum volume.		
		Plant will have to drain down drum again.		

DATE	TIME	SERVICE	TEMP.	PSIG
5/27/08	0600	Veolia walking down boiler checking for leaks and monitoring for		
		Leaks. Checking boiler temperatures. Still 200-204 degrees.		
	0630	Plant draining 2000 gallons of solution from boiler.		
	0730	Day shift in plant for shift change. Going over safety, job procedure		
		And job progress with night shift crew.		
	0800	Night shift crew out of plant. Veolia walking down boiler checking for		
		Leaks and monitoring for hydrogen.		
	0830	Veolia crew asked to vacate lab trailer while contruction crew on site		
		Makes overhead move of equipment.		
	0900	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen.		
	0930	Check temperature readings.		
	1000	Veolia walking down boiler checking temperatures, leaks and monitor		
		For hydrogen.		
	1100	Walking down boiler checking for leaks and monitor for hydrogen.		
	1200	Veolia walking down boiler.		
	1300	Veolia walking down boiler.		
	1400	Veolia walking down boiler.		
	1500	Veolia walking down boiler.		
	1530	Iron stage of boiler cleaning is complete based on chemical analysis.		
		Plant operations is starting to fan boiler to cool for copper stage of		
		Cleaning process.		
	1600	Veolia walking down boiler. Continue cooling boiler for copper stage.		
	1700	Veolia walking down boiler.		
	1730	Veolia crew hooking up oxygen equipment for copper stage of cleaning		
	1800	Veolia walking down boiler.		
	1820	Veolia pumping 990 gallons of Aqua Ammonia into truck tank for		
		Chemical injection for copper stage of cleaning.		
	1845	Continue pumping ammonia into truck tank for injection into boiler.		
	1900	Veolia walking down boiler.		
	1930	Veolia pumping 300 gallons of EDTA into boiler for a total of 4.43%		
		EDTA in the boiler. Follow through with 990 gallons of ammonia		
		And start oxygen blowing into boiler for copper stage.		
	2000	Continue blowing oxygen for copper stage. Veolia walking down boiler		

DATE	TIME	SERVICE	TEMP.	PSIG
5/27/08	2100	Continue copper stage of boiler cleaning blowing oxygen.		
	2130	Copper stage of cleaning completed based on chemical analysis and		
		EMF readings.		
	2145	Plant operation starting to drain boiler to waste metal cleaning tank.		
	2230	Boiler drained. Veolia obtained composite drain sample. To run		
		Analysis on sample.		
	2300	Veolia crew breaking down chemical cleaning equipment.		
	2400	Continue breaking down equipment.		
	0100	Veolia crew off location. Job Completed.		

DATE	TIME	SERVICE THERMAL EVAPORATION PROCESS	TEMP.	PSIG
6/17/08	0700	Veolia on site to setup for thermal evaporation of chemical waste from		
		Unit 5 and 6 chemical cleanings.		
	0900	Hold safety meeting with plant personnel at control room. Discussed		
		Thermal evaporation process and recorded control data on unit		
		That the evaporation will take place in (Unit # 5 Boiler)		
	1000	Start chemical evaporation at 49 gpm. Two Veolia personnel		
		Transporting waste from waste metal cleaning tank to frac tank at		
		Work site.		
	1115	Continue chemical evaporation at 52 gpm and continue to transport		
		Waste chemical from waste metal cleaning tank to frac tank.		
	1200	Continue chemical evaporation at 52 gpm. 6000 gallons evaporated.		
	1300	Continue chemical evaporation. 9000 gallons evaporated.		
	1400	Continue chemical evaporation at 67 gpm. 12,000 galons evaporated.		
	1500	Continue chemical evaporation at 67 gpm. 18,000 gallons evaporated.		
	1600	Continue chemical evaporation at 67 gpm. 21,000 gallons evaporated.		
	1700	Continue chemical evaporation at 67 gpm. 24,000 gallons evaporated.		
	1800	Continue chemical evaporation. 30,000 gallons evaporated.		
	1900	Night shift on site going over job progress, safety and job procedure.		
	1915	Day shift out of plant. Continue chemical evaporation at 67 gpm.		
	2000	Continue chemical evaporation, and transporting waste chemical to		
		Frac tank from the waste metal cleaning tank.		
	2100	Continue chemical evaporation.		
	2200	Continue chemical evaporation.		
	2300	Continue chemical evaporation.		
	2400	Continue chemical evaporation.		
6/18/08	0100	Continue chemical evaporation and transporting waste chemical to frac		
		Tank from the waste metal cleaning tank.		
	0200	Continue chemical evaporation.		
	0300	Continue chemical evaporation.		
	0400	Continue chemical evaporation.		
	0500	Continue chemical evaporation.		
	0600	Continue chemical evaporation.		
	0630	Day shift crew on site for shift change. Go over job progress and safety.		
	0700	Night shift out of plant. Continue chemical evaporation. 71,417 gallons		

DATE	TIME	SERVICE	TEMP.	PSIG
		Evaporated. Continue to transport waste from waste metal cleaning		
		Tank to frac tank. Check with control room operator on status of boiler.		
6/18/08	0800	Continue chemical evaporation at 67 gpm.		
	0900	Continue chemical evaporation. 79,600 gallons evaporated.		
	1000	Continue chemical evaporation. 83,000 gallons evaporated.		
	1100	Continue chemical evaporation. 87,022 gallons evaporated.		
	1200	Continue chemical evaporation. 90,147 gallons evaporated.		
	1300	Continue chemical evaporation and transporting waste to frac tank.		
	1400	Continue chemical evaporation. 97,500 gallons evaporated.		
	1500	Continue chemical evaporation.		
	1600	Continue chemical evaporation. 104,429 gallons evaporated.		
	1700	Continue chemical evaporation. 107,700 gallons evaporated.		
	1800	Continue chemical evaporation and transporting chemical waste.		
	1845	Night shift on site for shift change. Go over job progress and safety.		
	1900	Day shift out of plant.		
	2000	Continue chemical evaporation. 114,000 gallons evaporated.		
	2100	Continue chemical evaporation.		
	2200	Continue chemical evaporation.		
	2300	Continue chemical evaporation.		
	2350	Pull middle burn nozzle out of unit to change nozzle tip.		
		That is starting to leak around threads of nozzle.		
6/19/08	0100	Continue chemical evaporation and transporting waste to frac tank.		
	0200	Continue chemical evaporation.		
	0300	Continue chemical evaporation.		
	0400	Continue chemical evaporation.		
	0500	Continue chemical evaporation.		
	0600	Continue chemical evaporation.		
	0630	Day shift on site for shift change. Go over job progress and safety with		
		Night shift crew.		
	0700	Night shift out of plant. Continue chemical evaporation and hauling		
		Waste from the waste metal cleaning tank to the work site frac tank.		
	0800	Continue chemical evaporation. Check with control room operator to		
		See if there are any problems with the boiler operation.		
	0900	Continue chemical evaporation.		

DATE	TIME	SERVICE	TEMP.	PSIG
6/19/08	1000	Continue chemical evaporation.		
	1100	Continue chemical evaporation.		
	1200	Continue chemical evaporation.		
	1300	Continue chemical evaporation.		
	1400	Continue chemical evaporation and transporting waste to frac tank.		
	1500	Continue chemical evaporation.		
	1600	Continue chemical evaporation.		
	1700	Continue chemical evaporation.		
	1800	Continue chemical evaporation.		
	1900	Night shift in plant for shift change. Day shift out of plant.		
	2000	Continue chemical evaporation.		
	2200	Continue chemical evaporation.		
	2400	Continue chemical evaporation.		
6/20/08	0100	Continue chemical evaporation.		
	0300	Continue chemical evaporation.		
	0500	Continue chemical evaporation.		
	0700	Day shift in plant for shift change. Night shift out of plant.		
	0900	Continue chemical evaporation.		
	1100	Continue chemical evaporation.		
	1300	Continue chemical evaporation.		
	1500	Continue chemical evaporation.		
	1600	Vacuum out last of waste chemical from frac tank and rinse frac tank		
		Into circulator tank to finish evaporation process.		
	1700	Pump last of waste chemical. Flust injection hoses and nozzles with		
		Rinse water. Evaporation process completed. 170,000 gallons were		
		Evaporated during the process.		
	1720	Veolia crew breaking down evaporation equipment.		
	1900	Veolia off location. Evaporation procees completed.		

VEOLIA
ENVIRONMENTAL SERVICES

JOB SERVICE LOG

COMPANY: AEP – Conesville Plant		**DATE:** April 9, 2008
EQUIPMENT: Utility Boiler	**UNIT:** # 5	**SERVICE:** Chemical Cleaning
SOLVENT SYSTEM: Di- Ammonium EDTA		**VOLUME:** 51,400 gallons / 428,676 Pounds
CUSTOMER CONTACT: Bethany Schunn	**LOCATION:** Conesville, Ohio	**SUPERVISOR:** DJ McMillion

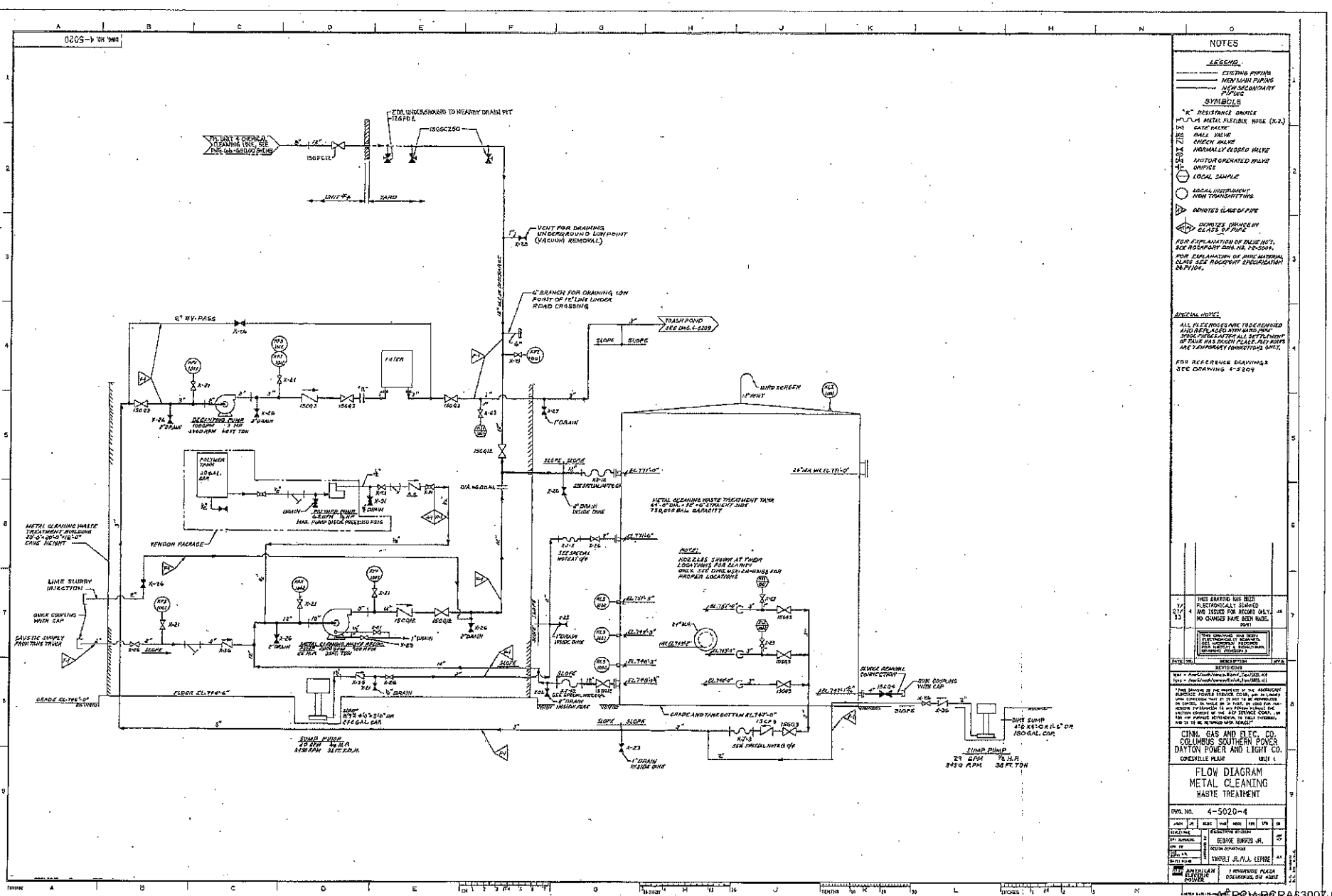
DATE	TIME	SERVICE	TEMP.	PSIG
4/9/08	0700	Veolia on site meeting with customer to spot equipment. Operations		
		Has to move some equipment out of area for Veolia to move chemical		
		Cleaning equipment into work area.		
	0830	Veolia spotting mobile lab in alley between units 5 and 6.		
	0850	Spotting chemical pump unit		
	0950	Veolia crew hooking up chemical injection hoses from pump unit to		
		Customers boiler injection connection.		
		Plant operations is still tagging boiler for cleaning.		
	1130	Plant electricians are preparing to hookup electric to Veolia's mobile		
		Lab.		
	1200	Veolia crew out of plant for lunch.		
	1230	Veolia back from lunch. Continue to set up chemical cleaning		
		Equipment.		
	1330	Continue setting up chemical cleaning equipment.		
	1430	Setup of equipment is complete except final connection of chemical		
		Injection hose to customers injection point on boiler.		
	1530	Veolia standing by waiting on boiler to be ready for chemical injection.		
	1630	Continue to standby waiting on plant. Setup mobile lab equipment.		
	1730	Continue to standby waiting on plant. Veolia crew waiting on chemical.		
		To show up at plant.		

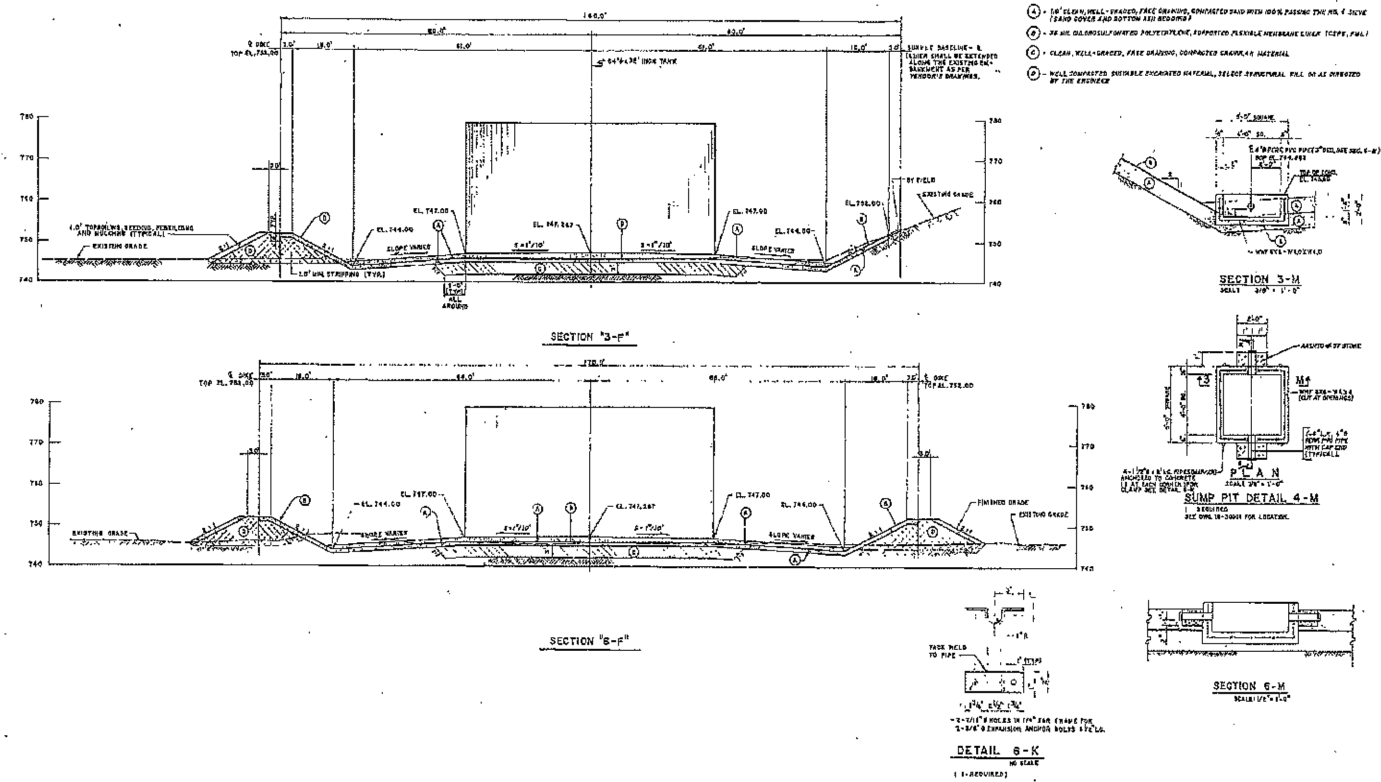
DATE	TIME	SERVICE	TEMP.	PSIG
4/9/08	1830	Veolia still standing by waiting on plant to heat boiler for chemical		
		Injection.		
	1930	Standing by. Night shift on site going over chemical cleaning procedure		
		And safety.		
	1945	Day shift out of plant. Night shift crew transferring chemical from		
		Chemical vendor's transport to Veolia's chemical transport.		
	2000	Veolia spotting chemical tanker at work site and hooking up hoses.		
	2100	Continue standing by waiting on plant to heat boiler for chemical		
		Injection.		
	2200	Second chemical transport has arrived at plant. Veolia crew transferring		
		Chemical to Veolia's chemical tanker.		
	2300	Continue standing by waiting on plant.		
	2400	Continue standing by.		
4/10/08	0100	Continue standing by waiting on plant.		
	0200	Continue standing by.		
	0445	Plant is now heating boiler. Veolia starting to mix 52 gallons of Cronox		
		240 inhibitor into EDTA for initial chemical injection. Mike Davis		
		Overseeing mixing of inhibitor and retaining sample of mix for plant.		
	0500	Continue waiting on boiler to be heated.		
	0600	Continue waiting on boiler to be heated.		
	0630	Day shift on site going over job rogress and safety with night shift crew		
	0700	Night shift crew out of plant.		
	0730	Veolia will continue to circulate EDTA and inhibitor until boiler is		
		Ready for chemical injection.		
	0800	Continue to stand by.		
	0840	Boiler is now hot at 200-208 degrees and ready for chemical injection.		
		Plant operations is starting to drain boiler drum down for chemical		
		Injection of 4,000 gallons of EDTA solvent and inhibitor.		
	0900	Boiler drum is now drained down to desired level to accommodate the		
		Initial chemical addition.		
	0905	Veolia crew and plant personnel holding safety meeting in unit 5		
		Control room orior to chemical injection.		
	0935	Start chemical injection into boiler drum.		
	1120	Chemical injection completed. Veolia flushing hoses so they can		

DATE	TIME	SERVICE	TEMP.	PSIG
4/10/08		Change out one section of injection hose that is leaking.		
	1200	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen gases.		
	1300	Veolia walking down boiler checking for leaks, monitoring temperature		
		And monitoring for hydrogen gases.		
	1400	Veolia walking down boiler.		
	1500	Veolia walking down boiler checking for leaks.		
	1600	Veolia walking down boiler.		
	1615	Plant wants to drain drum down due to drum level to high. Will drain		
		Out approximately 5,000 gallons to the waste metal cleaning tank.		
	1638	Finished draining down drum.		
	1700	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen gases.		
	1800	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen gases. Boiler temperature is holding very well at 200-204^{0}F.		
	1830	Night shift on location going over job progress, safety and chemical		
		Cleaning procedures with day shift crew. Hold safety meeting with		
		Control room personnel for night shift.		
	1900	Veolia day shift out of plant.		
	2000	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen.		
	2100	Veolia walking down boiler checking for leaks.		
	2200	Veolia walking down boiler.		
	2300	Veolia walking down boiler.		
	2400	Veolia walking down boiler.		
4/11/08	0100	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen.		
	0200	Veolia walking down boiler.		
	0215	Based on analysis and time, iron stage of cleaning is completed.		
		Start cooling boiler for copper stage.		
	0300	Veolia walking down boiler.		
	0400	Veolia walking down boiler.		
	0500	Veolia walking down boiler.		
	0600	Veolia walking down boiler.		

DATE	TIME	SERVICE	TEMP.	PSIG
4/11/08	0630	Shift change, night shift going over safety and progress of job with day		
		Shift crew.		
	0645	Veolia walking down boiler checking for leaks and monitoring for		
		Hydrogen. Plant operations preparing to drain 4,500 gallons from boiler		
		Drum to accommodate the injection of 990 gallons of ammonia and		
		260 gallons of EDTA to start copper stage of cleaning.		
	0715	Veolia pumping ammonia and EDTA into boiler and five gallons of		
		Anti foam for copper stage of cleaning.		
	0800	Veolia walking down boiler. Veolia flushing chemical injection lines		
		With water.		
	0845	Prepare to start blowing oxygen for copper phase of cleaning.		
	0900	Start blowing oxygen for copper removal. Veolia walking down boiler.		
		Continue blowing oxygen at 50 SCFM.		
	0945	Plant request that oxygen blow be stopped due to leak in blowdown		
		Line that leads back to flash tank. Flash tank is filling up and flowing		
		Out unvalved line to ash pond. Shutdown for maintainance to repair		
		Valve.		
	1000	Veolia walking down boiler while waiting on plant to repair valve and		
		Resume copper stage of cleaning.		
	1100	Continue standing by waiting on plant. Veolia walking down boiler		
		Checking for leaks and monitoring for hydrogen gases.		
	1120	Valve is now repaired. Start blowing oxygen again at 60 SCFM for		
		Copper stage.		
	1200	Continue copper stage. Veolia walking down boiler checking for leaks.		
	1300	Continue with copper stage, now blowing last cradle of oxygen. Veolia		
		Walking down boiler checking for leaks and monitoring for hydrogen.		
	1400	Copper stage of cleaning complete based on analysis and EMF readings		
	1415	Shut off oxygen and flush all injection lines and wash out chemical		
		Tanks and pump into boiler before draining boiler to chemical waste		
		Tank.		
	1500	Veolia breaking down chemical cleaning equipment.		
	1600	Continue breaking down chemical cleaning equipment.		
	1700	Move chemical cleaning equipment out of area and cleanup work site.		

DATE	TIME	SERVICE	TEMP.	PSIG
4/11/08	1800	Continue cleaning up work area. Have customer sign all time sheets.		
	1900	Veolia off location. Job Completed.		





LEGEND:

(A) - 1.0' CLEAN, WELL-GRADED, FREE DRAINING, COMPACTED SAND WITH 100% PASSING THE NO. 4 SIEVE (SAND COVER AND BOTTOM AND BEDDING)

(B) - 36 MIL CHLOROSULFONATED POLYETHYLENE, SUPPORTED FLEXIBLE MEMBRANE LINER (CSPE, FML)

(C) - CLEAN, WELL-GRADED, FREE DRAINING, COMPACTED GRANULAR MATERIAL

(D) - WELL COMPACTED SUITABLE EXCAVATED MATERIAL, SELECT STRUCTURAL FILL OR AS DIRECTED BY THE ENGINEER

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL CONFORM TO A.E.P.S.C. SPECIFICATIONS NO. [illegible]
2. ALL EXPOSED EDGES SHALL HAVE A ONE INCH BEVEL.
3. ALL EXPOSED VERTICAL EXTERIOR CONC. SURFACES SHALL HAVE RUBBED FINISH.
4. CONC. SHALL BE CAPABLE OF DEVELOPING A MIN. COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.
5. CLAMPS AND PIPES (MANNER) SHALL BE GALVANIZED OR BETTER.
6. SEE VENDOR DWG'S. FOR LINER PENETRATION AND ANCHORAGE DETAILS.
7. SEE MECHANICAL DESIGN DRAWINGS 4-5209 AND 4-5218 FOR PIPE PENETRATIONS.

MATERIALS

CONCRETE	1-C.Y.
[illegible]	[illegible]
LINER (CSPE, FML, 36 MIL)	[illegible] S.F.
1½" GALV. PIPE	[illegible] L.F.
CLAMP (DETAIL 6-K)	[illegible]
4" DIA. PERF. PVC PIPE	3 L.F.

ALL MATERIAL BY CONTRACTOR EXCEPT LINER

REFERENCES

16-30001	METAL CLEANING WASTE TREATMENT FACILITY — PLAN
4-5203	METAL CLEANING WASTE TREATMENT FACILITY — GENERAL ARRANGEMENT WITH YARD PIPING
4-5210	750,000 METAL CLEANING WASTE TREATMENT TANK
4-5211	PUMP HOUSE PIPING PLAN, SECTIONS AND DETAILS
4-5218	PIPING DETAILS

REVISIONS

THE CINCINNATI GAS AND ELECTRIC CO.
COLUMBUS SOUTHERN OHIO ELEC. CO.
THE DAYTON POWER AND LIGHT CO.

CONESVILLE PLANT

CONESVILLE, OHIO

METAL CLEANING WASTE TREATMENT FACILITY SECTIONS

DWG. NO. 16-30300-0

AEPCV-RCRA§3007-0119

UNIT 4 2009 CLEANING

American Electric Power
Conesville Plant
47201 CR 273
Conesville, OH 43811 9799
740 829 2378
www.aep.com

AMERICAN ELECTRIC POWER

June 29, 2009

Ohio EPA-SEDO
2195 Front St.
Logan, OH 43138
Att: Mr. Aaron Pennington
Mr. Dean Ponchak

Re: Unit 4 Chemical Cleaning Incineration

Dear Sirs,

Conesville Plant completed the incineration of the chemical cleaning waste from Unit 4 on 6/29/09. The Unit 4 Chemical Clean was completed on 5/18/09 and we received the analysis of the waste on 5/26/09. It was hazardous for Total Chromium @ 5.74 ppm. We circulated the tank for 24 hours and resampled on 5.27/09. Results of this sample was 7.80 ppm.

The plant set up 4-20,000 frac tanks for dilution and began hauling on 6/4/09. Each tank was diluted by 40-50% and then retested. Once the results were obtained from the lab, it was then incinerated in Unit 5. The burn began on 6/8/09 and we continued to move EDTA to the frac tanks, dilute, sample and incinerate until the remaining waste in the bulk tank was able to be diluted and rendered non-hazardous (6/22/09 @ 3.80 ppm.) We continued to burn from the main tank until 6/29/09 when the incineration and tank cleanout was complete.

We estimate that we incinerated 1,004,480 gallons of diluted diammonium EDTA waste. All of the sampling records are available for review at your request. If you have additional questions regarding this cleaning or incineration, please contact Georgeanne Hammond at 740-829-4065.

Sincerely,

Brian F. Scragg
Energy Production Manager
AEP Conesville

Cc: Mark Borman
Mark Stammen
File

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American Electric Power
Dolan Chemical Laboratory
4001 Bixby Road
Groveport, Ohio 43125

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	06/11/09
Lab Analysis No:	092247-001	**Date Received:**	06/11/09
Sample ID:	U4 Chemical Cleaning Tank #3	**Date Reported:**	06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.40	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	3.59	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

Report Issued by: Brian S Snyder

xc: D. B. Glazier/G. M. Hammond - Conesville Plant
D. E. Limes
D. H. Scott

Brian S. Snyder, Chemist II
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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092247-002
Sample ID: U4 Chemical Cleaning Tank #4

Date Collected: 06/11/09
Date Received: 06/11/09
Date Reported: 06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.07	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.61	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	4.60	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.7	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092204-001
Sample ID: Chemical Cleaning Staorage Tank #2

Date Collected: 06/09/09
Date Received: 06/09/09
Date Reported: 06/09/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Barium, Ba	0.29	mg/L	dam	06/09/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/09/09	SW 6010B	1
Chromium, Cr	3.42	mg/L	dam	06/09/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/09/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/09/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/09/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/09/09	SW 6010B	5

Report Issued by: Brian S. Snyder

xc: D. B. Glazier/G. M. Hammond - Conesville Plant
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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092201-001
Sample ID: Chemical Cleaning Storage Tank #3

Date Collected: 06/08/09
Date Received: 06/09/09
Date Reported: 06/09/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Barium, Ba	0.33	mg/L	dam	06/09/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/09/09	SW 6010B	1
Chromium, Cr	3.70	mg/L	dam	06/09/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/09/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/09/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/09/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/09/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092201-002
Sample ID: Chemical Cleaning Storage Tank #4

Date Collected: 06/08/09
Date Received: 06/09/09
Date Reported: 06/09/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Barium, Ba	0.27	mg/L	dam	06/09/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/09/09	SW 6010B	1
Chromium, Cr	4.16	mg/L	dam	06/09/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/09/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/09/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/09/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/09/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092210-001
Sample ID: U4 Metal Cleaning Waste

Date Collected: 06/09/09
Date Received: 06/09/09
Date Reported: 06/09/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Barium, Ba	0.35	mg/L	dam	06/09/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/09/09	SW 6010B	1
Chromium, Cr	2.87	mg/L	dam	06/09/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/09/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/09/09	SW 7470A	0.2
pH	8.0	s.u.	dmm	06/09/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/09/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/09/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092228-001
Sample ID: Metal Cleaning Waste - Tank 3

Date Collected: 06/10/09
Date Received: 06/10/09
Date Reported: 06/10/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Barium, Ba	0.49	mg/L	dam	06/10/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/10/09	SW 6010B	1
Chromium, Cr	3.81	mg/L	dam	06/10/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/10/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/10/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/10/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/10/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092228-002
Sample ID: Metal Cleaning Waste - Tank 4

Date Collected: 06/10/09
Date Received: 06/10/09
Date Reported: 06/10/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Barium, Ba	0.32	mg/L	dam	06/10/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/10/09	SW 6010B	1
Chromium, Cr	3.27	mg/L	dam	06/10/09	SW 6010B	5
Lead, Pb	0.09	mg/L	dam	06/10/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/10/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/10/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/10/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/10/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092228-001
Sample ID: Metal Cleaning Waste - Tank 3

Date Collected: 06/10/09
Date Received: 06/10/09
Date Reported: 06/10/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Barium, Ba	0.49	mg/L	dam	06/10/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/10/09	SW 6010B	1
Chromium, Cr	3.81	mg/L	dam	06/10/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/10/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/10/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/10/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/10/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092228-002
Sample ID: Metal Cleaning Waste - Tank 4

Date Collected: 06/10/09
Date Received: 06/10/09
Date Reported: 06/10/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/10/09	SW 6010B	5
Barium, Ba	0.32	mg/L	dam	06/10/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/10/09	SW 6010B	1
Chromium, Cr	3.27	mg/L	dam	06/10/09	SW 6010B	5
Lead, Pb	0.09	mg/L	dam	06/10/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/10/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/10/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/10/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/10/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092247-001
Sample ID: U4 Chemical Cleaning Tank #3

Date Collected: 06/11/09
Date Received: 06/11/09
Date Reported: 06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.40	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	3.59	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092247-002
Sample ID: U4 Chemical Cleaning Tank #4

Date Collected: 06/11/09
Date Received: 06/11/09
Date Reported: 06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.07	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.61	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	4.60	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.7	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

Report Issued by: Brian S. Snyder

xc: D. B. Glazier/G. M. Hammond - Conesville Plant
D. E. Limes
D. H. Scott

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American Electric Power
Dolan Chemical Laboratory
4001 Bixby Road
Groveport, Ohio 43125

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	05/28/09
Lab Analysis No:	092046-001	**Date Received:**	05/28/09
Sample ID:	U#4 Chemical Cleaning	**Date Reported:**	05/29/09

SW-846, 1010

Test	Results	Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Flash Point, Closed Cup	>60 °C	dmm	05/28/09	SW-846, 1010	60

*** Please note these results!**

Note: Recirculated

Report Issued by:

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xc: D. B. Glazier/G. M. Hammond - Conesville Plant
D. E. Limes
D. M. Sheets

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092046-001
Sample ID: U#4 Chemical Cleaning

Date Collected: 05/28/09
Date Received: 05/28/09
Date Reported: 05/29/09

TCLP per SW-846, 1311

Test		Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	<	0.05	mg/L	dam	05/29/09	SW 6010B	5
Barium, Ba		0.59	mg/L	dam	05/29/09	SW 6010B	100
Cadmium, Cd	<	0.005	mg/L	dam	05/29/09	SW 6010B	1
Chromium, Cr	*	7.80	mg/L	dam.	05/29/09	SW 6010B	5
Lead, Pb	<	0.05	mg/L	dam	05/29/09	SW 6010B	5
Mercury, Hg	<	0.0001	mg/L	chl	05/29/09	SW 7470A	0.2
pH		7.9	s.u.	dmm	05/28/09	SM20 4500-H B	
Selenium, Se	<	0.2	mg/L	dam	05/29/09	SW 6010B	1
Silver, Ag	<	0.05	mg/L	dam	05/29/09	SW 6010B	5

*** Please note these results!**

Note: Recirculated

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	05/18/09
Lab Analysis No:	091918-001	**Date Received:**	05/19/09
Sample ID:	#4 Chemical Cleaning	**Date Reported:**	05/26/09

SW-846, 1010

Test	Results	Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Flash Point, Closed Cup	>60 °C	dmm	05/20/09	SW-846, 1010	60

*** Please note these results!**

Note: Metal Waste Storage Tank

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 091918-001
Sample ID: #4 Chemical Cleaning

Date Collected: 05/18/09
Date Received: 05/19/09
Date Reported: 05/26/09

TCLP per SW-846, 1311

Test		Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As		0.05	mg/L	dam	05/26/09	SW 6010B	5
Barium, Ba		0.57	mg/L	dam	05/26/09	SW 6010B	100
Cadmium, Cd	<	0.005	mg/L	dam	05/26/09	SW 6010B	1
Chromium, Cr	*	5.74	mg/L	dam	05/26/09	SW 6010B	5
Lead, Pb		0.24	mg/L	dam	05/26/09	SW 6010B	5
Mercury, Hg	<	0.0002	mg/L	chl	05/21/09	SW 7470A	0.2
pH		8.0	s.u.	dmm	05/19/09	SM20 4500-H B	
Selenium, Se	<	0.2	mg/L	dam	05/26/09	SW 6010B	1
Silver, Ag	<	0.05	mg/L	dam	05/26/09	SW 6010B	5

*** Please note these results!**

Note: Metal Waste Storage Tank

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092245-001
Sample ID: U4 Chemical Cleaning Tank #1

Date Collected: 06/10/09
Date Received: 06/11/09
Date Reported: 06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.44	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	4.26	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	0.07	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.7	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092245-002
Sample ID: U4 Chemical Cleaning Tank #2

Date Collected: 06/10/09
Date Received: 06/11/09
Date Reported: 06/11/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Barium, Ba	0.47	mg/L	dam	06/11/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/11/09	SW 6010B	1
Chromium, Cr	3.69	mg/L	dam	06/11/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/11/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/11/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/11/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/11/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/11/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092275-001
Sample ID: Tank 3 Diluted Metal Cleaning Waste

Date Collected: 06/12/09
Date Received: 06/12/09
Date Reported: 06/12/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/12/09	SW 6010B	5
Barium, Ba	0.57	mg/L	dam	06/12/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/12/09	SW 6010B	1
Chromium, Cr	3.84	mg/L	dam	06/12/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/12/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/12/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/12/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/12/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/12/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092268-001
Sample ID: U4 Chemical Cleaning Tank #4

Date Collected: 06/12/09
Date Received: 06/12/09
Date Reported: 06/12/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/12/09	SW 6010B	5
Barium, Ba	0.43	mg/L	dam	06/12/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/12/09	SW 6010B	1
Chromium, Cr	4.40	mg/L	dam	06/12/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/12/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/12/09	SW 7470A	0.2
pH	8.0	s.u.	dmm	06/12/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/12/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/12/09	SW 6010B	5

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	06/22/09
Lab Analysis No:	092395-001	**Date Received:**	06/23/09
Sample ID:	Chemical Cleaning 062209 TCLP 001	**Date Reported:**	06/23/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/23/09	SW 6010B	5
Barium, Ba	0.30	mg/L	dam	06/23/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/23/09	SW 6010B	1
Chromium, Cr	3.88	mg/L	dam	06/23/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/23/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/23/09	SW 7470A	0.2
pH	8.0	s.u.	dmm	06/23/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/23/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/23/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092377-001
Sample ID: Chemical Cleaning Tank #1

Date Collected: 06/19/09
Date Received: 06/22/09
Date Reported: 06/23/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Barium, Ba	0.32	mg/L	dam	06/22/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/22/09	SW 6010B	1
Chromium, Cr	3.73	mg/L	dam	06/22/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/22/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/22/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/22/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/22/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092377-002
Sample ID: Chemical Cleaning Tank #2

Date Collected: 06/19/09
Date Received: 06/22/09
Date Reported: 06/23/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Barium, Ba	0.37	mg/L	dam	06/22/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/22/09	SW 6010B	1
Chromium, Cr	4.91	mg/L	dam	06/22/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/22/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/22/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/22/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/22/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092377-003
Sample ID: Chemical Cleaning Tank #3

Date Collected: 06/19/09
Date Received: 06/22/09
Date Reported: 06/23/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Barium, Ba	0.34	mg/L	dam	06/22/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/22/09	SW 6010B	1
Chromium, Cr	3.59	mg/L	dam	06/22/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/22/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/22/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/22/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/22/09	SW 6010B	5

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	06/19/09
Lab Analysis No:	092377-004	**Date Received:**	06/22/09
Sample ID:	Chemical Cleaning Tank #4	**Date Reported:**	06/23/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Barium, Ba	0.34	mg/L	dam	06/22/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/22/09	SW 6010B	1
Chromium, Cr	3.72	mg/L	dam	06/22/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/22/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/22/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/22/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/22/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/22/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092334-001
Sample ID: Chemical Cleaning Tank#1

Date Collected: 06/17/09
Date Received: 06/18/09
Date Reported: 06/18/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Barium, Ba	0.40	mg/L	dam	06/18/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/18/09	SW 6010B	1
Chromium, Cr	3.30	mg/L	dam	06/18/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/18/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/18/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/18/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/18/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092334-002
Sample ID: Chemical Cleaning Tank#2

Date Collected: 06/17/09
Date Received: 06/18/09
Date Reported: 06/18/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Barium, Ba	0.44	mg/L	dam	06/18/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/18/09	SW 6010B	1
Chromium, Cr	3.65	mg/L	dam	06/18/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/18/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/18/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/18/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/18/09	SW 6010B	5

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	06/17/09
Lab Analysis No:	092334-003	**Date Received:**	06/18/09
Sample ID:	Chemical Cleaning Tank#3	**Date Reported:**	06/18/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Barium, Ba	0.38	mg/L	dam	06/18/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/18/09	SW 6010B	1
Chromium, Cr	2.99	mg/L	dam	06/18/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/18/09	SW 7470A	0.2
pH	7.9	s.u.	dmm	06/18/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/18/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/18/09	SW 6010B	5

Report Issued by: Brian S. Snyder

cc: D. B. Glazier/G. M. Hammond - Conesville Plant
D. E. Limes
D. H. Scott

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Dolan Chemical Laboratory
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Groveport, Ohio 43125

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092334-004
Sample ID: Chemical Cleaning Tank#4

Date Collected: 06/17/09
Date Received: 06/18/09
Date Reported: 06/18/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.05	mg/L	dam	06/18/09	SW 6010B	5
Barium, Ba	0.47	mg/L	dam	06/18/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/18/09	SW 6010B	1
Chromium, Cr	3.50	mg/L	dam	06/18/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/18/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/18/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/18/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/18/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/18/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092281-001
Sample ID: Chemical Cleaning Tank #1

Date Collected: 06/12/09
Date Received: 06/13/09
Date Reported: 06/15/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.08	mg/L	dam	06/13/09	SW 6010B	5
Barium, Ba	0.37	mg/L	dam	06/13/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/13/09	SW 6010B	1
Chromium, Cr	3.80	mg/L	dam	06/13/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/13/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/15/09	SW 7470A	0.2
pH	8.00	s.u.	wke	06/13/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/13/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/13/09	SW 6010B	5

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Waste Analysis

Location:	Conesville Plant	**Date Collected:**	06/12/09
Lab Analysis No:	092281-002	**Date Received:**	06/13/09
Sample ID:	Chemical Cleaning Tank #2	**Date Reported:**	06/15/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.08	mg/L	dam	06/13/09	SW 6010B	5
Barium, Ba	0.34	mg/L	dam	06/13/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/13/09	SW 6010B	1
Chromium, Cr	3.64	mg/L	dam	06/13/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/13/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/15/09	SW 7470A	0.2
pH	8.00	s.u.	wke	06/13/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/13/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/13/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092281-003
Sample ID: Chemical Cleaning Tank #3

Date Collected: 06/12/09
Date Received: 06/13/09
Date Reported: 06/15/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.07	mg/L	dam	06/13/09	SW 6010B	5
Barium, Ba	0.30	mg/L	dam	06/13/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/13/09	SW 6010B	1
Chromium, Cr	3.39	mg/L	dam	06/13/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/13/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/15/09	SW 7470A	0.2
pH	8.00	s.u.	wke	06/13/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/13/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/13/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092281-004
Sample ID: Chemical Cleaning Tank #4

Date Collected: 06/12/09
Date Received: 06/13/09
Date Reported: 06/15/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	0.05	mg/L	dam	06/13/09	SW 6010B	5
Barium, Ba	0.36	mg/L	dam	06/13/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/13/09	SW 6010B	1
Chromium, Cr	3.82	mg/L	dam	06/13/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/13/09	SW 6010B	5
Mercury, Hg	< 0.0010	mg/L	chl	06/15/09	SW 7470A	0.2
pH	8.00	s.u.	wke	06/13/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/13/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/13/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092299-001
Sample ID: Diluted Waste Tank 1

Date Collected: 06/15/09
Date Received: 06/16/09
Date Reported: 06/17/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Barium, Ba	0.59	mg/L	dam	06/17/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/17/09	SW 6010B	1
Chromium, Cr	3.92	mg/L	dam	06/17/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/17/09	SW 7470A	0.2
pH	8.0	s.u.	dmm	06/16/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/17/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/17/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092299-002
Sample ID: Diluted Waste Tank 2

Date Collected: 06/16/09
Date Received: 06/16/09
Date Reported: 06/17/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Barium, Ba	0.49	mg/L	dam	06/17/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/17/09	SW 6010B	1
Chromium, Cr	4.92	mg/L	dam	06/17/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/17/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/16/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/17/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/17/09	SW 6010B	5

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092299-003
Sample ID: Diluted Waste Tank 3

Date Collected: 06/15/09
Date Received: 06/16/09
Date Reported: 06/17/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Barium, Ba	0.53	mg/L	dam	06/17/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/17/09	SW 6010B	1
Chromium, Cr	4.42	mg/L	dam	06/17/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/17/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/16/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/17/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/17/09	SW 6010B	5

Report Issued by: Brian S. Snyder

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Waste Analysis

Location: Conesville Plant
Lab Analysis No: 092299-004
Sample ID: Diluted Waste Tank 4

Date Collected: 06/15/09
Date Received: 06/16/09
Date Reported: 06/17/09

TCLP per SW-846, 1311

Test	Results		Analyzed By	Analysis Date	Analytical Method	USEPA Limit
Arsenic, As	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Barium, Ba	0.46	mg/L	dam	06/17/09	SW 6010B	100
Cadmium, Cd	< 0.005	mg/L	dam	06/17/09	SW 6010B	1
Chromium, Cr	3.61	mg/L	dam	06/17/09	SW 6010B	5
Lead, Pb	< 0.05	mg/L	dam	06/17/09	SW 6010B	5
Mercury, Hg	< 0.0005	mg/L	chl	06/17/09	SW 7470A	0.2
pH	7.8	s.u.	dmm	06/16/09	SM20 4500-H B	
Selenium, Se	< 0.2	mg/L	dam	06/17/09	SW 6010B	1
Silver, Ag	< 0.05	mg/L	dam	06/17/09	SW 6010B	5

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Form WW-R01
Rev. 7, 6/01

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Waste Analysis

Location: Conesville Plant
Test: Flash Point, Closed Cup
Analytical Method: SW-846, 1010

Date Collected: 06/16/09
Date Received: 06/17/09
Date Reported: 06/17/09

Lab Analysis No.	Sample ID	Results	Report Limit	Method Detection Limit	Analyst - Date
092318-001	061609FP1	>60 °C		1	dmm - 06/17/09
092318-002	061609FP2	>60 °C		1	dmm - 06/17/09

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PRODUCT DATA SHEET
January, 2007

MODERN FIXED AXLE TANK
(462 BBL ROUND BOTTOM VERSION)

GENERAL INFORMATION

This tank has a smooth interior walls and round bottom for easy cleaning.

WEIGHTS AND MEASURES

- Capacity: ..... 462 BBL (19,404 gallons)
- Height: ..... 10'-8" (grade to roof plate)
  13'-4" (grade to upright guardrail
- Width : ..... 8'-6"
- Length: ..... 44'-2" (nose to tail)
  40'-5" (end wall to end wall)
- Weight: ..... 27,600 lbs.

STRUCTURAL DESIGN

- Floor: ..... ¼"thick ASTM A36 carbon steel round bottom
- Sides/Ends: ..... ¼" thick ASTM A36 carbon steel
- Top Deck: ..... ¼" thick ASTM A36 carbon steel
- Wall Frame: ..... 6" wide channel-shaped steel (on exterior side of walls)
- Roof Frame: ..... 3" wide x 1½" tall channel-shaped steel (on exterior side of roof deck)

FEATURES

- Valves: ..... 2-Front & 1-Rear: 4"- wafer butterfly valve. Cast iron body, Buna-N seat & seals, 416 SS stem, Nylon 11 coated ductile iron disk w/ plug and chain.
- Relief Valve: ..... 16 oz./in² pressure setting, 0.4 oz./in² vacuum setting; Buna-N seal
- Front Inlet: ..... 8" connection, flanged on the inside and outside of the tank
- Front Drain: ..... 4"-150# flanged connection with butterfly valve
- Rear Drain: ..... 4"-150# flanged connection with butterfly valve and remote operation handle
- Fill Line: ..... 3" pipe, top of tank with cap and chain

FEATURES - cont.

- Gel Line: ..... 4" sch. 40 pipe flanged with butterfly valve
- Top Vapor Connection: ..... 4"-150# weld neck flange with blind flange (chained) and Buna N gasket
- Front Manway: ..... One - 21½" I.D. domed lid, slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners,, hinged away from stairs, Buna-N (NBR) seal.
- Side Manway: ..... One - 21½" I.D. domed lid, slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners,, mounted on passenger side and hinged to front of tank. Buna-N (NBR) seal.
- Top Manway: ..... One - 21½" I.D. domed lid w/anti-personnel bars, slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners, hinged to side of tank. Buna-N (NBR) seal.
- Stairway: ..... Front-mounted with access from driver's side of tank
- Level Gauge: ..... Ball style with 2-8" 304 SS floats. Floor supports hold floats ½" off floor.
- Tires: ..... 11.00 x 22.5 (nylon tubeless)
- Axles: ..... 25K axle, automatic slack adjusters, top mounted 30 service chambers, outboard drums

SURFACE DETAILS

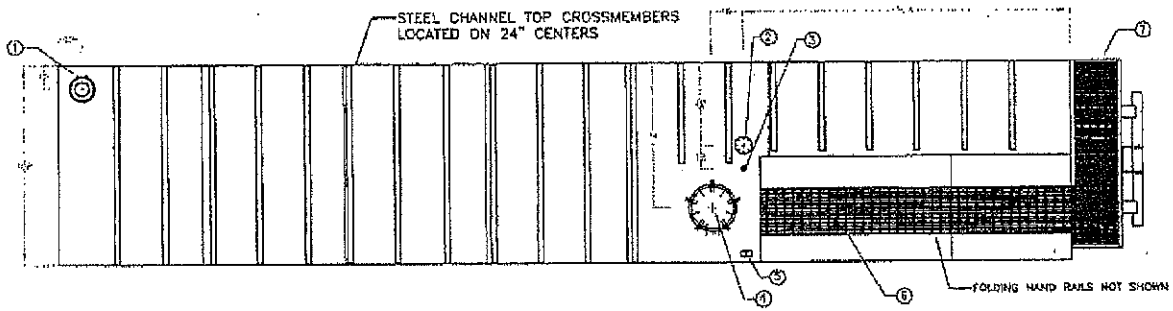
- Exterior Coating: ..... High gloss polyurethane paint
- Interior Coating: ..... Chemical resistant lining
- Safety Paint: ..... Safety yellow – handrails, hatch covers and trip hazard surfaces
- Decal Mounts: ..... Removable 10-gauge steel, 48"x48", both sides of tank at top rear. Secured with nylock nuts or bolts with lock washers.

TESTS/CERTIFICATIONS

- Test Performed: ..... 100% water tested to full capacity, 3 psi – 20 min test; Level I, II and III inspections on a scheduled basis

BAKER

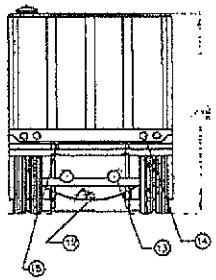
3020 Old Ranch Parkway • Suite 220 • Seal Beach, CA • 562-430-6262



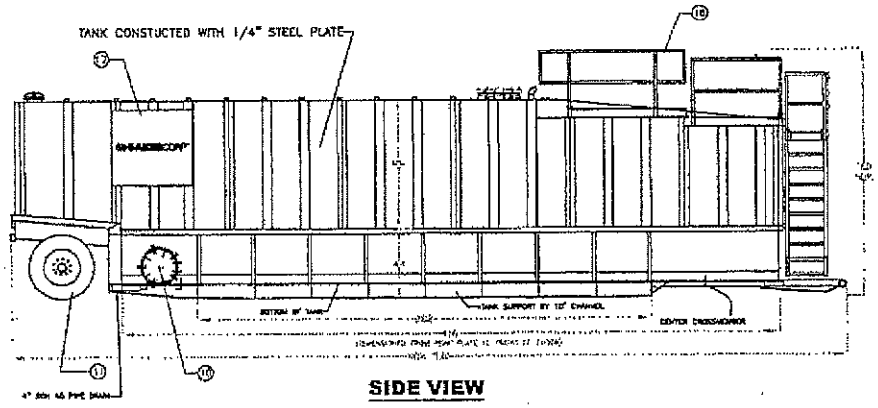
TOP VIEW

1) FLANGE MOUNT BLAYLOCK LL10 P/V VENT
2) 4" FLANGE WITH BLIND CAP AND CHAIN
3) 2" COUPLING WITH PLUG
4) MANWAY WITH INTERNAL BARS, 21 1/2"ID, DOMED LID
5) 3" IMPULSE WITH CAP AND CHAIN
6) SAFETY WALK WAY
7) ACCESS STAIRS
8) LEVEL GAUGE W/3-#8" STAINLESS STEEL BARS, "V" SUPPORTS HOLDS BALLS 1/2" OFF FLOOR
9) FRONT DRAIN W/VALVE, PLUG, CHAIN
10) MANWAY, 21 1/2"ID, DOMED LID (2)
11) 11.00 X 22.5 TUBLESS TIRE ON 10 HOLE STEEL WHEEL
12) 4" FLANGE VALVE, THREADED FLANGE, PLUG, CHAIN REMOTE OPERATION HANDLE
13) 25K AXLE, AUTOMATIC SLACK ADJUSTERS, TOP MOUNTED 30 SERVICE CHAMBERS, OUTBOARD DRUMS, HUTCH 9700 SUSPENSION, 3 LEAF HIGH ARCH SPRINGS
14) DOT TAIL LIGHTS AND LOWER MARKER LIGHTS, NO TOP LIGHTS
15) 1" X 6" PIPE W/WELDED CAP & THREADED CAP
16) FOLDING HAND RAILS
17) 48x48 BOLTED PLATE (for Baker Base)

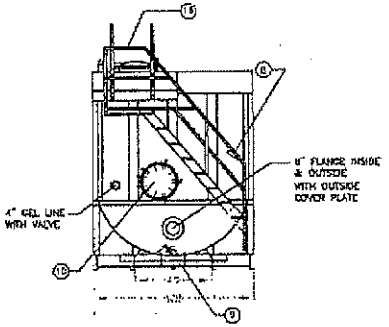
NOTE:
ALL VALVES GRAY SERIES 30, CAST IRON BODY, 416SS STEM, BUNA-N SEAT, NYLON 11 COATED DUCTILE IRON DISC, HANDLES AS SHOWN.
ALL MALL AND ROOF RIBS TO BE CONTINUOUSLY WELDED, ALL TANK SHELL SEAMS TO BE WELDED ON BOTH SIDES.
100% CAPACITY WATER TEST @ 3 PSI
SOME ITEMS MAY NOT BE SHOWN IN ALL VIEWS



REAR VIEW



SIDE VIEW



FRONT VIEW

SPECIFICATIONS:
1) Tank Capacity: 19,404 gallons (462 BBL)
2) Tank Weight: 27,600 lbs. (empty)

NOTES:
1. This drawing is a baseline representation for this model of tank. Variations between this drawing and the actual equipment in the field can and do exist, primarily with appurtenance locations, sizes and quantities. Consult your local BakerCorp representative if specific needs exist.
2. THIS TANK IS *NOT DESIGNED FOR TRANSPORTING LIQUIDS*. It should be moved only when empty.
3. Tanks of this type have an internal lining (coating) on the wetted surfaces.
4. This tank is equipped with a pressure/vacuum relief valve set at 1.0 lbs/sq. in. pressure and 0.4 oz/sq.in. vacuum.

REV.	DESCRIPTION	DATE	BY
G			
F			
E			
D			
C			
B	Fixed text placement	7/12/05	ZDR
A	Title Block Description changed to indicate volume of tank	10/1/04	PJB

BAKER 3020 OLD RANCH PARKWAY SEAL BEACH, CA 90740-2751

SCALE: Do Not Scale	SIZE: B		ORIGINAL DWG. DATE: 10SEP02
DRAWN BY: P.J.B.	APPROVED BY: —		CAT/CLASS: —
TITLE: MODERN MFG. ROUND BOTTOM FIXED AXLE TANK – 462 BBL			SHEET: 1 OF 1
DRAWING NO.: S-2-M0006-1-			REV.: B

VEOLIA
ENVIRONMENTAL SERVICES

JOB SERVICE LOG

COMPANY: AEP – Columbus & Southern Power		**DATE:** May 15, 2009
EQUIPMENT: Super Critical Boiler	**UNIT:** Conesville Unit # 4	**SERVICE:** Chemical Cleaning
SOLVENT SYSTEM:		**VOLUME:** 58,400 gallons / 487,056 Pounds
CUSTOMER CONTACT: Mike Davis / Angela Larrick	**LOCATION:** Conesville, Ohio	**SUPERVISOR:** Jim Morrison / Bill Buckliew

DATE	TIME	SERVICE Chemical Cleaning	TEMP.	PSIG
5/15/09	0800	Veolia crew on site to receive Star Training and Drug testing.		
	1100	Completed Star training and drug test of employees that required test.		
	1130	Veolia spotting chemical cleaning equipment at work site.		
	1230	Continue setup of chemical cleaning equipment.		
	1330	Continue setup of equipment.		
	1430	Continue equipment setup.		
	1530	All chemical cleaning equipment is spotted and hooked up. Veolia		
		Crew standing by waiting on plant operations order to start circulation		
		And heating of the boiler.		
	1630	Continue standing by waiting on plant operations.		
	1730	Continue waiting on plant. Veolia putting up barricade tape around		
		Chemical cleaning equipment and areas of the boiler.		
	1830	Continue waiting on plant operations to fill boiler to start circulation		
		And heating. Night shift on location going over safety and chemical		
		Cleaning procedures.		
	1900	Day shift crew out of plant. Veolia crew still waiting on plant		
		Operations to fill boiler.		
	2000	Veolia standing by waiting on plant. Boiler has leaks in it that has to		
		Be repaired before chemical cleaning can start. Repairs could take		
		Most of the night to complete. Veolia crew standing by waiting on		

DATE	TIME	SERVICE	TEMP.	PSIG
		Plant operations to make repairs to boiler.		
5/16/09	0630	Veolia day shift crew in plant for shift change. Go over job progress,		
		Safety and procedures with night shift crew.		
	0700	Night shift out of plant. Plant operations is still making repairs to		
		Boiler. Veolia crew standing by.		
	0800	Veolia standing by waiting on boiler repairs to be made.		
	0900	Operations informed Veoila that repairs have been completed and they		
		Would be filling boiler soon.		
	1000	Veolia standing by waiting on boiler to be filled.		
	1100	Circulation and heating will start soon. Veolia and plant personnel		
		Going over circulation procedure and safety at unit 4 control room.		
	1130	Plant operation releasing water from boiler to Veolia heat exchanger		
		And pump unit.		
	1135	Veolia bleeding all high point vents on heat exchanger and pumper.		
	1140	Veolia has some leaks on heat exchanger and pump unit. Repairing		
		Leaks before circulation starts.		
	1150	All leaks repaired and circulation and heating started as plant		
		Operations vents boiler.		
	1230	Start IR Scan of boiler tubes as circulation and heating continues.		
	1400	IR Scan completed. Continue circulating and heating boiler for		
		Chemical injection.		
	1500	Continue circulation, heating and venting boiler. Veolia walking down		
		Boiler and monitoring temperatures and pressures.		
	1600	Continue heating and circulating boiler while walking down boiler		
		To check for leaks and to monitor temperatures and pressures.		
	1700	Continue circulating and heating boiler. Walking down boiler		
		Checking for leaks and monitoring temperatures and pressures.		
	1800	Continue circulating and heating boiler. Veolia walking down boiler		
		Checking for leaks and monitoring temperatures.		
	1830	Night shift on site going over job progress, procedures and safety with		
		Day shift crew.		
	1900	Day shift out of plant. Veolia walking down boiler.		
	2000	Plant operations opening two additional valves to increase flow rate.		
		Veolia walking down boiler checking for leaks and monitoring		

DATE	TIME	SERVICE	TEMP.	PSIG
5/16/09		Temperatures.	205^0	
	2100	Veolia and plant operations preparing to inject chemicals into the		
		Boiler through the flow path of Veolia Super Pumper.		
	2130	Veolia and plant operations holding safety meeting prior to chemical		
		Injection.		
	2145	Start injection of corrosion inhibitor, 60 gallons of Cronox 240.		
	2200	Injection of inhibitor completed. Start chemical injection of		
		Di-Ammonium EDTA. 5000 gallons to be injected into the boiler.		
	2245	Chemical injection completed. Continue circulation and maintaining		
		Temperature at $205\text{-}207^0$ F.		
	2300	Veolia walking down boiler monitoring for leaks, temperatures and		
		Hydrogen with LEL meter.		
5/17/09	0005	Veolia injecting additional 2000 gallons of EDTA into boiler based		
		Chemical analysis. Veolia walking down boiler checking for leaks		
		And monitoring temperatures and hydrogen.		
	0130	Chemical injection complete.		
	0200	Veolia making another chemical addition of 2000 gallons based on		
		Chemical analysis. Veolia walking down boiler.		
	0235	Chemical addition completed.		
	0300	Continue circulation and maintaining temperature. Veolia walking		
		Down boiler and monitoring temperatures and hydrogen.		
	0400	Veolia injecting remaining 500 gallons of EDTA into boiler based on		
		Chemical analysis. Veolia walking down boiler.		
	0500	Veolia walking down boiler monitoring temperatures and hydrogen		
		And checking for leaks. Continue circulating and maintaining		
		Temperature.		
	0600	Continue circulation and heating. Veolia walking down boiler.		
	0630	Day shift in plant going over safety and job progress and procedures		
		With night shift crew.		
	0700	Night shift crew out of plant. Veolia walking down boiler.		
	0730	Hold safety meeting with plant operation personnel.		
	0800	Continue circulation and maintaining temperature of boiler. Veolia		
		Walking down boiler checking for leaks and monitoring temperatures		
		And for hydrogen.		

DATE	TIME	SERVICE	TEMP.	PSIG
5/17/09	0900	Continue circulation and maintaining temperature. Veolia walking		
		Down boiler.		
	1000	Continue circulating and heating boiler. Veolia walking down boiler.		
	1030	Veolia taking on water in circulator tank to mix 55 gallons of Aqua		
		Ammonia for neutralization stage.		
	1045	Meet Doug Hubard on 12th floor with LEL monitor to check vent on		
		Boiler.		
	1100	Monitor did show high concentrations setting off monitor alarm.		
		Veolia walking down boiler. Continue circulation and maintaining		
		Boiler temperatures.		
	1200	Continue circulating and heating. Veolia walking down boiler.		
	1300	Continue circulating and heating boiler. Veolia walking down boiler.		
	1400	Chemical analysis indicated that chemical concentrations have leveled		
		Discussion between Veolia chemist, Plant chemist and Doug Hubbard		
		Lead to agreement that the iron stage was completed. Plant operations		
		Preparing for displacement of chelant to the waste metal cleaning tank		
		Veolia walking down boiler.		
	1430	Veolia turning off steam to heat exchanger to start chelant		
		Displacement. Start mixing 55 gallons of ammonia in water.		
	1530	Chelant displacement completed. Start pumping ammonia solution		
		Into boiler for neutralization. Continue circulation of boiler.		
	1630	Veolia shutting down pumper unit for plant operations to start first		
		High velocity flush.		
	1800	High elocity flush is completed. Veolia starting circulation and heating		
		Again to 150 F. for Ammonia and Leminox solution.		
	1830	Night shift on site going over job progress and procedure and safety.		
	1900	Day shift out of plant.		
	2000	Continue circulating and heating boiler.		
	2200	Injecting Ammonia and Leminox solution into boiler for passivation.		
		Continue circulation and maintaining heat.		
	2300	Continue circulating and maintaining heat.		
	2400	Shut down circulation and turn off steam to start displacement and		
		Second high velocity flush.		

DATE	TIME	SERVICE	TEMP.	PSIG
5/18/09	0030	Veolia breaking down chemical cleaning equipment. Plant operations		
		Starting to flush out Veolia equipment.		
	0100	Valving out Veolia equipment to start high velocity flush of boiler		
		Circuitry.		
	0200	Continue high velocity flush of boiler. Veolia draining heat exchanger		
		And pumper piping.		
	0300	Continue high velocity flush. Veolia breaking down chemical cleaning		
		Equipment and mobile laboratory.		
	0400	Boiler cleaning completed.		
	0500	Veolia off location.		
	0800	Day shift in plant to remove tankers, circulator and mobile lab from		
		Work site.		
	0900	Continue moving equipment off site.		
	1000	Continue removal of chemical cleaning equipment.		
	1100	Veolia off site.		

ATTACHMENT FOR QUESTION 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 13 1981

OFFICE OF WATER
AND WASTE MANAGEMENT

Mr. Paul Emler, Jr.
Chairman
Utility Solid Waste Activities
Group
Suite 700
1111 Nineteenth Street, N.W.
Washington, D.C. 20036

Dear Mr. Emler:

This is a response to your letter of October 10, 1980 to Administrator Costle, regarding the recent Solid Waste Disposal Act Amendments of 1980 and their relation to the electric utility industry. In your letter and its accompanying document, you discussed the specific amendments which address fossil fuel combustion wastes, and suggested interpretive language which EPA should adopt in carrying out the mandate of the amendments. You requested a meeting with our staff to make us more fully aware of the solid waste management practices of the electric utility industry, and to discuss the effect of the amendments on the utility solid waste study which EPA is currently conducting.

I appreciated the opportunity to meet with you, in your capacity as chairman of the Utility Solid Waste Activities Group (USWAG), on November 21 to discuss your concerns. I am taking this occasion to share with you the most recent EPA thinking on the exclusion from our hazardous waste management regulations of waste generated by the combustion of fossil fuels, and to confirm certain agreements which were reached during our meeting. The language contained in this letter should provide you and your constituents with an adequate interpretation of the fossil fuel combustion waste exclusion in Section 261.4(b)(4) of our regulations. This letter is also being circulated to appropriate Agency personnel, such as our Regional Directors of Enforcement, for their information and use. We intend to issue in the Federal Register an official Regulations Interpretation Memorandum reflecting the policies articulated in this letter.

In our May 19, 1980 hazardous waste management regulations, we published an exclusion from Subtitle C regulation for those fossil fuel combustion wastes which were the subject of then pending Congressional amendments. The language of that exclusion in §261.4(b)(4) of our May 19 regulations is identical to pertinent language of Section 7 of the Solid Waste Disposal Act

Amendments of 1980 (P.L. 96-482) which was enacted on October 21, 1980 and which mandates that exclusion. Specifically, the exclusion language of our regulations provides that the following solid wastes are not hazardous wastes:

> "Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels."

Residues from the Combustion of Fuel Mixtures

The first point which you raise in your letter and your "Proposed RIM Language" is the interpretation of the term "primarily" used in this exclusion language. EPA believes that Congress intended the term "primarily" to mean that the fossil fuel is the predominant fuel in the fuel mix, i.e., more than 50 percent of the fuel mix. (See Congressional Record, February 20, 1980, p. H1103, remarks of Congressman Horton and p. H1102, remarks of Congressman Bevill.) Therefore, EPA is interpreting the exclusion of §261.4(b)(4) to include fly ash, bottom ash, boiler slag and flue gas emission control wastes (hereinafter referred to as "combustion wastes") that are generated by the combustion of mixtures of fossil fuels and alternative fuels, provided that fossil fuels make up at least 50 percent of the fuel mix.

This interpretation begs the question of whether the exclusion also extends to combustion wastes that result from the burning of mixtures of fossil fuels and hazardous wastes. We have limited data which indicates that spent solvents listed in §261.31 of our regulations, certain distillation residues listed in §261.32, waste oils that may be hazardous wastes by virtue of characteristics or the mixture rule, and other hazardous wastes are often burned as supplemental fuels--sometimes in proportionally small amounts but sometimes in significant amounts (comprising 10 percent or more of the fuel mix ratio)--particularly in industrial boilers but sometimes in utility boilers. EPA is concerned about the human health and environmental effect of the burning of these hazardous wastes: both the effect of emissions into the atmosphere and the effect of combustion residuals that would be contained in the fly ash, bottom ash, boiler slag and flue gas emission control wastes.

We intend to address the first of these concerns in our future development of special requirements applicable to hazardous wastes that are beneficially used or legitimately recycled. In §261.6 of our May 19, 1980 regulations, we currently exempt from regulatory coverage hazardous wastes that are benefically used or legitimately recycled, except that, where these wastes are listed as hazardous wastes or sludges, their storage or transportation prior to use or recycle is subject to our

regulations. We clearly explained in the preamble to Part 261 of our May 19 regulations that we fully intend to eventually regulate the use and recycling of hazardous wastes and, in doing so, would probably, in most cases, develop special requirements that provide adequate protection of human health and the environment without unwarranted discouragement of resource conservation. Consequently, although the burning of hazardous waste as a fuel (a beneficial use assuming that the waste has a positive fuel value) is not now subject to our regulations (except as noted above) it may well be subject to our regulation in the future.

Our second concern with combustion of fuel mixtures is the one at focus in this interpretation. It must first be noted that we do not intend for §261.6 to provide an exemption from regulation for combustion wastes resulting from the burning of hazardous wastes in combination with fossil fuels; it only provides an exemption for the actual burning of hazardous wastes for recovery of fuel value. Thus, if these combustion wastes are exempted from our regulation, such exemption must be found through interpretation of §261.4(b)(4). Secondly, we note that although the pertinent language in Section 7 of the Solid Waste Disposal Act Amendments of 1980 and the related legislative history on this matter speak of allowing the burning of alternative fuel without precisely defining or delineating the types of alternative fuel, the only examples of alternative fuels used in the legislative history are refuse derived fuels. Therefore, a literal reading of the legislative history might enable us to interpret the exclusion to include combustion wastes resulting from the burning of fossil fuels and other fuels, including hazardous wastes. However, since each of these legislative comments was made in the context of refuse derived fuels or other non-hazardous alternate fuels, we do not believe the Congressional intent compels us to make such an interpretation if we have reason to believe that such combustion wastes are hazardous.

Presently, we have little data on whether or to what extent combustion wastes are "contaminated" by the burning of fossil fuel/hazardous waste mixtures. The data we do have (e.g., burning of waste oils) suggests that the hazardous waste could contribute toxic heavy metal contaminants to such combustion wastes. When coal is the primary fuel, the amount of resulting contamination is probably in amounts that are not significantly different than the metals that would be contributed by the fossil fuel component of the fuel mixture. This may not be the case with oil and gas, where huge volumes of waste are not available to provide a dilution effect. We suspect that the other hazardous constituents of the hazardous wastes that typically would be burned as a fuel are either thermally destroyed or are emitted in the flue gas (and therefore are part of our first concern as discussed above). If

these data and this presumption are true, then combustion wastes resulting from the burning of coal/hazardous waste mixtures should not be significantly different in composition than combustion wastes generated by the burning of coal alone. Because the Congress has seen fit to exclude the latter wastes from Subtitle C, pending more study, we feel compelled to provide the same exclusion to the former wastes.

Accordingly, we will interpret the exclusion of §261.4(b)(4) to include fly ash, bottom ash, boiler slag and flue gas emission control wastes generated in the combustion of coal/hazardous-waste mixtures provided that coal makes up more than 50 percent of the fuel mixture.

We offer this interpretation with great reluctance and with the clear understanding it is subject to change, if and when data indicate that combustion wastes are significantly contaminated by the burning of hazardous wastes as fuel. We also offer this interpretation with the understanding, as discussed at our meeting of November 21, that the utility industry will work with us over the next several months to improve our data on this matter. We believe it is essential that we make a more informed judgement and possible reconsideration of our interpretation of the exclusion as soon as possible and before completion of our longer-term study of utility waste which is proceeding. Accordingly, we would like you to provide to us all available data on the following questions by August 1, 1981:

1. What types of hazardous wastes are commonly burned as fuels in utility boilers? In what quantity? In what ratio to fossil fuels? How often? What is their BTU content?

2. Does the burning of these wastes contribute hazardous constituents (see Appendix VIII of Part 261 of our regulations) to any of the combustion wastes? If so, what constituents, and in what amounts? How does the composition of combustion wastes change when hazardous wastes are burned?

Co-disposal and Co-treatment

The second issue raised in your letter was whether the exclusion extends to wastes produced in conjunction with the burning of fossil fuels which are co-disposed or co-treated with fly ash, bottom ash, boiler slag and flue gas emission control wastes. As examples of such wastes, you specifically mention boiler cleaning solutions, boiler blowdown, demineralizer regenerant, pyrites, cooling tower blowdown, or any "wastes of power plant origin whose co-treatment with fly ash, bottom ash, slag and flue gas emission control sludges is regulated under State-or-EPA-sanctioned management or treatment plans."

The legislative history on this matter clearly indicates that the Congress intended that these other wastes be exempted from Subtitle C regulation provided that they are mixed with and co-disposed or co-treated with the combustion wastes and further provided that "there is no evidence of any substantial environmental danger from these mixtures." (See Congressional Record, February 20, 1980, p. H 1102, remarks of Congressman Bevill; also see remarks of Congressman Rahall, Congressional Record, February 20, 1980, p. H1104.)

We have very little data on the composition, character and quantity of these other associated wastes (those cited above), but the data we do have suggest that they are generated in small quantities relative to combustion wastes, at least when coal is the fuel, and that they primarily contain the same heavy metal contaminants as the combustion wastes, although they may have a signficantly different pH than the combustion wastes. These limited data therefore suggest that, when these other wastes are mixed with and co-disposed or co-treated with the much larger quantities of combustion wastes, their composition and character are "masked" by the composition and character of the combustion wastes; that is, they do not significantly alter the hazardous character, if any, of the combustion wastes.

Given this information base and given the absence of definitive information indicating that these other wastes do pose a "substantial danger" to human health or the environment, we believe it is appropriate, in the light of Congressional intent, to interpret the §261.4(b)(4) exclusion to include other wastes that are generated in conjunction with the burning of fossil fuels and mixed with and co-disposed or co-treated with fly ash, bottom ash, boiler slag and flue gas emission control wastes.

We offer this interpretation with some reluctance because it is made in the absence of definitive information about the hazardous properties of these other wastes or their mixtures with combustion wastes. We therefore believe it is imperative that we proceed to collect all available data on this matter within the next several months and reconsider this interpretation when these data are assessed. Toward that end and consistent with the discussion at our meeting of November 21, we are asking that you assist us in collecting these data. Specifically, we ask that you collect and submit by August 1, 1981, any available data on the following questions:

1. What are the "other" wastes which are commonly mixed with and co-disposed or co-treated with fly ash, bottom ash, boiler slag or flue gas emission control wastes? What are their physical (e.g., sludge or liquid) and chemical properties? Are they hazardous wastes in accordance with Part 261?

2. What are the co-disposal or co-treatment methods employed?

3. How often are these wastes generated? In what quantities are they generated? Are they commonly treated in any way before being co-disposed?

4. Does the industry possess any data on the environmental effects of co-disposing of these wastes? Groundwater monitoring data? What are the results?

The interpretation on other associated wastes provided in this letter is limited to wastes that are generated in conjunction with the burning of fossil fuels. We do not intend to exempt hazardous wastes that are generated by activities that are not directly associated with fossil fuel combustion, steam generation or water cooling processes. Thus, for example, the §261.4(b)(4) exclusion does not cover pesticides or herbicide wastes; spent solvents, waste oils or other wastes that might be generated in construction or maintenance activities typically carried out at utility and industrial plants; or any of the commercial chemicals listed in §261.33 which are discarded or intended to be discarded and therefore are hazardous wastes. Further, the exclusion does not cover any of the hazardous wastes listed in §§261.31 or 261.32 of our regulations. None of these listed wastes were mentioned in your letter or our discussions.

The interpretation on other wastes is also limited to wastes that traditionally have been and which actually are mixed with and co-disposed or co-treated with combustion wastes. If any of these other wastes (e.g., boiler cleaning solutions, boiler blowdown, demineralizer regenerant, pyrites and cooling tower blowdown) are segregated and disposed of or treated separately from combustion wastes and they are hazardous wastes, they are not covered by the exclusion. In the same vein, the exclusion does not cover other wastes where there are no combustion wastes (or relatively small amounts of combustion wastes) with which they might be mixed and co-disposed or co-treated--a situation which might prevail where natural gas or oil is the principal fossil fuel being used. Therefore, this interpretation of the exclusion applies only where coal is the primary fuel. We feel this is a legitimate interpretation of Congressional intent, wherein the argument of little potential environmental hazard, primarily due to the dilution factor, is clearly based upon co-disposal or co-treatment with the huge volumes of wastes generated during coal combustion.

EPA Utility Waste Study

The groups of questions raised above bring us to the final subject which you address concerning the study of utility solid waste management which EPA is conducting. We agree that the study, as currently being conducted, does not focus on the matters discussed in this letter. We would, however, like to address these matters and include them in our report to Congress, to the extent possible. To accomplish this, we plan to meet in the very near future with our contractor, Arthur D. Little, Inc., to discuss what studies may need to be carried out in addition to their currently planned activities under the contract. The inputs of your organization could be quite useful in this effort. It may be impossible, however, to modify our present study to include a detailed investigation of all of the issues discussed above.

Notwithstanding, we would like to address the matters discussed in this letter within a shorter time frame--during the next six months. Based on our meeting of November 21, it is my understanding that the utility industry, working closely with EPA, is willing to develop data on the questions put forth above. We agreed that, as a first step, USWAG will prepare a study outline designed to obtain these data. EPA staff and industry representatives designated by your organization will then mutually review the information needs. The data collection effort will then follow. Finally, data and analyses will be presented to EPA for review. This will enable us to reconsider the interpretation provided in this letter and make any changes deemed necessary. Therefore, I would appreciate it if you would designate a technical representative as USWAG's contact person for this coordinated data collection effort.

In the meantime, and pending completion of this effort, EPA will interpret 40 CFR §261.4(b)(4) to mean that the following solid wastes are not hazardous wastes:

(a) Fly ash, bottom ash, boiler slag and flue gas emission control wastes resulting from (1) the combustion solely of coal, oil, or natural gas, (2) the combustion of any mixture of these fossil fuels, or (3) the combustion of any mixture of coal and other fuels, up to a 50 percent mixture of such other fuels.

(b) Wastes produced in conjunction with the combustion of fossil fuels, which are necessarily associated with the production of energy, and which traditionally have been, and which actually are, mixed with and co-disposed or co-treated with fly ash, bottom ash, boiler slag, or flue gas emission control wastes from coal combustion.

This provision includes, but is not limited to, the following wastes:

(1) boiler cleaning solutions,

(2) boiler blowdown,

(3) demineralizer regenerant,

(4) pyrites, and

(5) cooling tower blowdown.

I am hopeful that our future research activities together will prove fruitful and that these issues can be rapidly resolved. I have designated Ms. Penelope Hansen of my staff as the EPA point of contact for this effort. You may reach her at (202) 755-9206.

Sincerely yours,

Gary N. Dietrich
Associate Deputy Assistant Administrator
for Solid Waste

SWER 95-0025

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C. 20460

MAY 12 1995

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. B. A. Caves
Assistant Division Director
State Of Oklahoma
Department of Environmental Quality
Waste Management Division
1000 NE Tenth Street
Oklahoma City, Oklahoma 73117-1212

Dear Mr. Caves:

Thank you for your letter of February 13, 1995 regarding the Environmental Protection Agency's (EPA's) Policy Statement on the clarification of the Resource Conservation and Recovery Act (RCRA) Land Disposal Restrictions (LDRs) pertaining to dilution prohibition and combustion of inorganic metal-bearing hazardous wastes (40 CFR § 268.3).

Your letter identifies a facility that performs routine cleaning of a boiler using tetra-ammonium EDTA to remove metal deposits. These cleaning wastes are diluted to remove the hazardous characteristic, and then combusted. You state that the combustion residuals are exempt under 40 CFR 261.4(b)(4) for fossil fuel combustion wastes. Because of this exemption, there is no land disposal or use constituting disposal; therefore, LDRs do not apply (including the policy on combustion of inorganic metal-bearing hazardous wastes). While the referenced process is permissible, wastewater treatment may be more appropriate to remove chromium.

If you have questions about this response, please contact Sherri Stevens of the Waste Treatment Branch on (703) 308-8467.

Sincerely yours,

Elizabeth A. Cotsworth

for Michael Shapiro, Director
Office of Solid Waste

MARK S. COLEMAN
Executive Director

FRANK KEATING
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

February 13, 1995

Elliott P. Laws, Assistant Administrator
United States Environmental Protection Agency
Office of Solid Waste and Emergency Response
401 M St., S.W.
Washington, DC 20460

Dear Mr. Laws:

This letter is to request an interpretation of how EPA's May 23, 1994 policy statement on the Clarification of the Land Disposal Restrictions' Dilution Prohibition and Combustion of Inorganic Metal-Bearing Hazardous Wastes applies to the following situation:

> A facility performed routine chemical cleaning of a steam generation boiler to remove metal deposits that have accumulated within the boiler's tubes, drums, and headers. The chemical cleaning involved the use of tetra-ammonium EDTA as the cleaning solvent. Tetra-ammonium EDTA was used because of its ability to remove metal deposits by reacting with them to form chelates which are then removed via flushing and rinsing. To initiate the cleaning process, tetra-ammonium EDTA was introduced into the boiler water and circulated over a period of time. Once the cleaning was determined to be adequate, the tetra-ammonium EDTA wastewater was removed from the boiler and placed into a series of frac tanks for temporary storage.
>
> Chemical analysis of six samples of the wastewaters in the frac tanks revealed total chromium levels ranging from 1.4 mg/l to 22.0 mg/l, with five samples above the toxicity characteristic level of 5.0 mg/l. These wastewaters were then diluted on-site with additional water to lower the chromium concentrations to below the toxicity characteristic levels which resulted in a total volume of water approximately four times greater after dilution than before dilution. The dilution was stated to have been performed for the express purpose of removing the wastewater's hazardous characteristic so as to facilitate transportation off-site.
>
> These non-hazardous wastewaters were then transported to one of the facility's coal-fired boilers for injection/burning. It should be noted that if the wastewaters were not diluted, they could not have been legally introduced into the boiler as the boiler does not have a RCRA permit. Information provided by the facility revealed that during the wastewater injection/burning process, a ratio of 24:1 to 36:1 of coal vs. wastewater was maintained. The ash generated from this process was subsequently transported to a non-hazardous waste landfill for disposal, with a small amount provided to various counties for road construction projects.

The facility believes that because the wastewaters were not destined for land disposal but were sent for burning/evaporation in a boiler, the LDR prohibition against dilution does not apply to this case. As the facility stated, "dilution of the wastewater was not performed to achieve compliance with the applicable treatment standards in anticipation of land disposal, but to remove the wastewater's hazardous characteristic in anticipation of its management in a boiler." As such, the facility believes it was permissible to dilute the wastewaters to facilitate transportation to and management within the boiler. The ash generated from this process was then disposed of as a non-hazardous waste under the exclusion granted under 40 CFR 261.4(b)(4) for fossil fuel combustion wastes.

Your May 23, 1994 memorandum states that in general, combustion of inorganic, metal-bearing hazardous wastes is considered impermissible dilution because the metals are not being destroyed, removed, or immobilized in the combustion process but are simply being mixed in with combustion ash. As your memorandum stated "adequate treatment (stabilization or metal recovery to meet LDR treatment standards) has not been performed and dilution has occurred."

While the wastewaters in this case were not considered hazardous when injected into the boiler, they were hazardous upon generation. As such, even though one might not be able to consider the combustion of the non-hazardous wastewaters themselves as impermissible dilution prior to land disposal, it is arguable that dilution prior to combustion is impermissible dilution, especially since the ash generated in the process was ultimately land disposed. By utilizing this method, it appears the facility has land disposed a hazardous waste which was prohibited from land disposal upon generation without undergoing proper treatment prior to disposal.

I appreciate your time in reviewing this situation and providing a response as to whether the EPA considers this process to be: 1) impermissible dilution, and/or 2) a legitimate method of disposal for this waste stream. If you have any questions or require additional information, please contact Mr. Jon Roberts of my staff at (405) 271-7082.

Sincerely,

H. A. Caves, Assistant Division Director
Waste Management Division

HAC/JAR

cc: Dave Bussard, Director of Characterization and Assessment Division

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus OH 43216-1049

December 16, 2008

Mr. Gabriel Coriell
Ohio Valley Electric Company
P.O Box 372
Cheshire, Ohio 45620

Re: Ohio Valley Electric Company, Kyger Creek Station
US EPA ID No.: OHD049651854

Dear Gabriel:

In an October 20, 2008 email, you asked me to verify that Ohio EPA has determined your use of a frac tank system to manage potentially hazardous boiler cleanout wastes meets the definition of a totally enclosed treatment facility as defined in Ohio Administrative Code (OAC) rule 3745-50-10(A)(119) I apologize for taking so long to reply to you

After reviewing the information you provided, concerning the operation and construction of the boiler cleanout system, we agree that the system is exempt from Ohio's hazardous waste regulations and permitting requirements as a totally enclosed treatment facility according to OAC rules 3745-50-45(C)(4), 3745-54-01(G)(5) and 3745-65-01(C)(9). In addition, we reviewed information submitted by Douglas Green of Utility Solid Waste Activities Group and agree that any wastes (including wastewaters) generated from the boiler cleanout are excluded under the Bevill exclusion [OAC rule 3745-51-04(b)(4)]. As such these wastes are not subject to the dilution prohibition found in the land disposal restrictions in OAC chapter 3745-270

I hope this helps you, if you have any questions please feel free to email me or call me at (614) 644-2950.

Sincerely,

Jeffrey M Mayhugh, Supervisor
Regulatory Services Unit
Regulatory and Information Services Section
Division of Hazardous Waste Management

cc: Gary Edwards, OVEC
Rich Stewart, DHWM, SEDO

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9521.1994(01)

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

October 17, 1994

MEMORANDUM

SUBJECT: Regulation of Fuel Blending and Related Treatment and Storage Activities

FROM: Director
Office of Solid Waste

TO: Hazardous Waste Management Division Directors,
Regions I-X

The purpose of this memorandum is to address a number of questions under the Resource Conservation and Recovery Act (RCRA) regarding the regulatory status of hazardous waste fuel blending activities. The memorandum is concerned primarily with facilities that are commonly known as "fuel blenders," although the waste management activities of these facilities most often include a set of integrated waste processing operations more diverse and complex than just the fuel blending activities themselves. A number of issues have been raised regarding the applicability of the RCRA permitting requirements and the land disposal restriction (LDR) requirements to these facilities. The guidance provided below discusses these issues generally. However, since many fuel blending operations are complex, there may be some facility-specific regulatory concerns that are best addressed on a case-by-case basis.

Permit Requirements

The RCRA program regulates hazardous waste storage, treatment and disposal activities with the permitting requirements of 40 CFR Part 270, and with unit-specific standards and other substantive requirements of Parts 264-268. Hazardous waste fuel blending facilities have activities that constitute storage and/or treatment of hazardous wastes. Consequently, they are subject to full RCRA regulation, including permitting, with few exceptions as discussed

below.

Fuel blending operations are addressed in Part 266. Specifically, §266.101(c) states that, "owners and operators of facilities that store hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of Parts 264, 265 and 270 of this chapter..." This provision further states, "These standards apply to storage by the burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner."

Some fuel blenders have asserted that, since their activities are considered recycling, the blending operation is exempt from permit requirements according to §261.6(c)(1). Section 261.6(a)(2), however, clearly states that hazardous wastes which are recycled materials and are burned for energy recovery"...are regulated under Subparts C through H of Part 266 of this chapter and all applicable provisions in Parts 270 and 124 of this chapter." This provision makes it clear that fuel blending is not exempt from regulatory standards or permitting.

It is possible that fuel blending in tanks or containers could be exempt from permitting, but only if the blending occurs at the site where the wastes being blended are generated. The permit-exempt management would have to meet the provisions of §262.34, which requires the waste to be processed within 90 days in units that comply with the technical standards of Part 265, Subpart J (for tanks), and Subpart I (for containers). The generator must also comply with specific emergency response and personnel training provisions of Part 265. This permit exemption is not available if the unit is classified under Part 265 as a thermal treatment unit (Subpart P). Thus, fuel blending is treated like any other treatment or storage activity for purposes of qualifying for the ninety-day generator permit exemption.

There may be some recycling operations at a fuel blending facility that are exempt from permitting, even though the fuel blending process itself is not exempt. The exemption is only available to units that are solely engaged in permit-exempt recycling; if the reclaimed materials are sometimes sent for use as a fuel, then the recycling unit would be subject to the permitting standards. In States that are authorized for the RCRA program, the State recycling exemptions must be as stringent as the Federal

program.

Appropriate Unit Standards

Most fuel blending facilities employ unit operations that are regulated under the tank standards of Subpart J of either Part 264 or 265. However, some facilities are using other devices such as shredders, grinders, filters, microwave units and distillation columns in their hazardous waste management operations. Depending on the specific configuration of these operations, they are permitted as either tank systems (including ancillary equipment) or as miscellaneous units under Subpart X. Furthermore, additional permit conditions may be imposed using the omnibus-authority of RCRA Section 3005(c)(3) as necessary to protect human health and the environment. Since these operations vary from site to site, the appropriate permitting authority (the State or EPA Regional Office) must decide which unit standards are the most relevant for each specific facility.

Air Emission Standards

Another question that has been raised concerns the applicability of the organic air emission standards for process vents and equipment leaks (Subparts AA and BB, Parts 264/265). These standards limit organic emissions from (1) process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that manage hazardous wastes with 10 parts per million by weight (ppmw) or greater total organic concentration, and (2) leaks from equipment that contains or contacts hazardous waste streams with 10 percent by weight or greater total organics. Due to the typically high organic content of the hazardous wastes managed at fuel blending facilities, we would expect the Subpart AA and BB requirements to be applicable.

The AA and BB requirements are also applicable to hazardous waste recycling units if they are located at hazardous waste management facilities that have other units subject to permitting. Although some recycling units are exempt from the unit-specific standards of Parts 264 and 265 pursuant to §261.6(c), such units must comply with any applicable AA and BB requirements of those Parts. See §261.6 (d).

On July 22, 1991 (56 FR 33490), the Agency proposed unit-

specific air emission standards that would provide additional controls on tanks, containers, and Subpart X units, among others. When these standards are promulgated as final rules (promulgation is scheduled for November 15, 1994), they will be applicable to fuel blender facilities.

Transfer Facilities

Transfer facilities are those transportation related sites including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous wastes are held or repackaged during the normal course of transportation. Section 263.12 allows these facilities to store wastes in containers without RCRA permits as long as specific packing requirements are followed and the wastes do not remain on-site for more than 10 days. Transfer operations are limited to bulking and consolidation of wastes. Selective blending of hazardous waste fuels to meet a fuel specification at a transfer facility is not an appropriate activity under §263.12; this would constitute hazardous waste treatment requiring a permit.

Land Disposal Restrictions

Generators

Generators of prohibited hazardous wastes (i.e. hazardous wastes required to meet a treatment standard before they can be land disposed) must comply with certain notification, certification, and recordkeeping requirements designed to assure proper tracking of the waste and adequate notice to the treatment facility of applicable treatment standards, as set forth in 40 CFR 268.7(a). (Note that if an offsite fuel blender/multi-purpose facility treats or otherwise manages a waste such that a new point of generation occurs, then the offsite facility becomes a generator and is therefore subject to these generator requirements.) These provisions apply whenever a generator ships a prohibited waste to another entity for eventual land disposal, and so apply when generators send prohibited wastes to fuel blenders/multi-purpose treatment/storage facilities. Although the wastes may be combusted, some residue (such as combustion ash) would be land disposed and must meet the treatment standard applicable to the combusted hazardous waste (as discussed at 58 FR 29872; May 24, 1993). Information normally required to be included in the notice are:

- EPA hazardous waste number
- constituents of concern
- treatability group
- manifest number waste analysis data (where available)

According to §268.9(a), these provisions also apply when generators send characteristic wastes off-site. If the generator treats the characteristic waste to make it non-hazardous before sending it to a fuel blender/multi-purpose facility, a one-time notice and certification must be placed in the generator's files and also be sent to the EPA region or authorized State, according to §268.9(d). This one-time notice provision applies only to cases where wastes are hazardous by reason of characteristic alone, (as discussed in 55 FR 22662-63;
June 1, 1990), and so does not apply when a mixture includes a listed waste.

There are circumstances where an otherwise-prohibited waste destined for combustion may not be subject to LDR requirements (including the tracking requirements) because neither the waste nor the residue from treating the waste is subject to a treatment standard when land disposed. This could occur where hazardous wastes are going to be burned for energy recovery in a Bevill device, such as a boiler or cement kiln. If the wastes are burned for energy recovery in a Bevill device that processes normal Bevill raw materials as well, and the Bevill device can show that its residues were not significantly affected by its hazardous waste-burning activities (the "significantly affected" test is found in 40 CFR 266.112), then the residues can retain Bevill-exempt status and not have to meet LDR treatment standards. Further, if the Bevill device produces a product that is used in a manner constituting disposal (e.g., a cement or light-weight aggregate kiln), and the hazardous waste is burned for energy recovery rather than for destruction or as an ingredient, then the product is not required to meet LDR treatment standards: In these situations where neither residues nor products are subject to LDR treatment standards, the original generator's waste would not be considered prohibited from land disposal. According to §268.7(a)(6), if such a generator can assure that the conditions discussed above are all true regarding the disposition of its otherwise prohibited waste, then the generator is only required to prepare a one-time notice for its facility records documenting this

disposition and not to comply with other tracking/notification requirements. If a generator is not in a position to know that this is the case, then the full notification/certification requirements under §268.7(a) would apply.

Fuel Blending Facilities

According to §268.7(b), treatment facilities (e.g., fuel blenders, BIFs, etc.) must also prepare a notification and certification for prohibited wastes. These provisions ordinarily apply to fuel blending operations because combustion residues are ultimately land disposed and the combustion residue ordinarily remains subject to LDR treatment standards. These treatment standards would continue to apply to characteristic wastes that no longer exhibit a characteristic when land disposed, according to §268.40(e), so that de-characterized residues from burning prohibited characteristic wastes are still subject to treatment standards. (Note, that for D001 wastes, combustion residues meet the BDAT standard since these standards require a method of treatment rather than treating hazardous constituents to a specified concentration level.)

Because fuel blenders are intermediate treatment operations, they must comply with §268.7(b)(6) (assuming the intermediate treatment does not fully achieve the treatment standard). Specifically, this section requires the fuel blender to prepare the same notification and certification that is required for generators, which in some cases will be the one-time notification discussed for generators above and in other cases will be applicable to each waste shipment. The notification and certification would accompany the blended fuel when it leaves the site to be transported to the subsequent treater (e.g., BIF).

If you have any questions on the applicability of the regulations and permitting requirements for fuel blending activities, please call James Michael of my staff at (703) 308-8610. Questions on the applicability of the land disposal restrictions (LDR) on fuel blending activities should be directed to Rhonda Craig of my staff at (703) 308-8771.

RCRA Branch Chiefs, Regions I-X
RCRA Permit Section Chiefs, Regions I-X
Enforcement Section Chiefs, Regions I-X

Waste Combustion Permit Writers' Workgroup

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RO 11881

RELEVANT PAGES FROM CONESVILLE PLANT NPDES PERMIT

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

9. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from outfall 0IB00013608. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 608 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Day	Grab	All
01042 - Copper, Total (Cu) - ug/l	1000	-	-	1000	-	-	-	1/Day	Grab	All
01045 - Iron, Total (Fe) - ug/l	1000	-	-	1000	-	-	-	1/Day	Grab	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total Estimate	All

Notes for station 0IB00013608:

- All chemical metal cleaning wastewater shall be tested to meet the above referenced effluent limitations prior to discharge to the ash pond.

- Sampling shall be performed when discharging. If NO DISCHARGE OCCURS DURING THE ENTIRE MONTH, report "AL" in the first column of the first day of the month on the 4500 form (Discharge Monitoring Report). A signature is still required.

- See Part II, Item L.

J. Outfall 0IB00013002 shall be limited to storm runoff free from industrial or process related contaminants present due to plant operations with the following exceptions: discharges from fire fighting activities; fire hydrant flushings; potable water sources including water line flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used; air conditioning condensate; uncontaminated boiler condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated by industrial activity

K. There shall be no discharge of polychlorinated biphenyl compounds attributable to the permittee's operation

L. The permittee shall adhere to the following procedure for the treatment of chemical metal cleaning wastewater (chemical metal cleaning wastewater refers to those operations using chemical compounds for the cleaning of any metal process equipment including, but not limited to, boiler tube cleaning):

1. Notify the District Engineer of Ohio EPA at least two weeks prior to the date of an anticipated chemical cleaning operation and type of cleaning compound to be used. Any change in schedule or cleaning compound shall be reported as soon as possible.

2. Units 3, 5 and 6 chemical metal cleaning wastewater, including rinses, shall be pumped to on-site holding tanks (spill control shall be provided for these holding tanks or the chemical metal cleaning tank). If the wastewater is not a hazardous waste as defined in ORC 3734.01(J) then it may be evaporated by injection into an operating boiler

The permittee shall submit a report to Ohio EPA within 14 days after the wastewater is either evaporated in an operating boiler or hauled off site to an approved disposal facility which includes the following:

a. Estimate the volume of chemical metal cleaning waste including rinse water.

b. If the wastewater was evaporated, indicate the date and time the wastewater was evaporated and into which boiler the wastewater was injected.

c. If the wastewater was hauled off site, identify the boiler cleaned, and indicate that the wastewater was manifested

d. Any unusual events occurring during the chemical metal cleaning and the treatment period